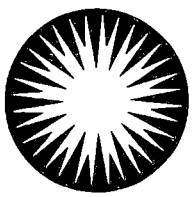
SALEM GENERATING STATION
SEMIANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT
SGS RERR-43

SALEM UNIT NOS. 1 & 2

UNIT 1 DOCKET NO. 50-272
UNIT 2 DOCKET NO. 50-311
OPERATING LICENSE NO. DPR-70
OPERATING LICENSE NO. DPR-75



FEBRUARY, 1998

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The Energy People

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RADIOACTIVE EFFLUENT RELEASE REPORT
JULY - DECEMBER 1997
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SALEM GENERATING STATION
RADIOACTIVE EFFLUENT RELEASE REPORT
JULY - DECEMBER 1997

INTRODUCTION

This report, SGS-RERR-43, summarizes information pertaining to the releases of radioactive materials in liquid, gaseous and solid form from the Salem Generating Station (SGS) Units 1 and 2 for the period July 1, 1997 to December 31, 1997.

This semiannual Radioactive Effluent Release Report (RERR) is submitted for both Salem Units and combines those sections which are common to each unit. Separate tables of releases and release totals are included whenever separate processing systems exist.

Salem Unit 1 is a Westinghouse Pressurized Water Reactor which has a licensed core power of 3411 MWt and an approximate net electrical output of 1115 MWe. Salem Unit 1 achieved initial criticality on December 11, 1976 and went into commercial operations on June 30, 1977.

Salem Unit 2 is a Westinghouse Pressurized Water Reactor which has a licensed core power of 3411 MWt and an approximate net electrical output of 1115 MWe. Salem Unit 2 achieved initial criticality on August 2, 1980 and went into commercial operations on October 13, 1981.

The report is prepared in the format of Regulatory Guide 1.21, as required by Specification 6.9.1.8 of the Salem Technical Specifications. Preceding the tables summarizing the gaseous and liquid discharges and solid waste shipments are our responses to parts A-F of the "Supplemental Information" section of Regulatory Guide 1.21.

As required by Regulatory Guide 1.21, our Technical Specification limits are described in detail within this report along with a summary description of how measurements and determinations of the total activity discharged were developed.

To facilitate determination of compliance with 40CFR190 requirements, the following information on electrical output is provided.

Unit 1 generated 0 megawatt-hours of electrical energy (net) during the reporting period.

Unit 2 generated 2,523,891 megawatt-hours of electrical energy (net) during the reporting period.

Results of liquid and gaseous composites analyzed for Sr-89, Sr-90 and Fe-55, and Containment pressure relief data for the fourth quarter of 1997 were not available for inclusion in this report. The results of these composites will be provided in the next Radioactive Effluent Release Report.

The Sr-89, Sr-90 and Fe-55 analyses for the first half of 1997 (refer to RERR-42) have been completed; amended pages to RERR-42 are included in this report.

PART A. PRELIMINARY SUPPLEMENTAL INFORMATION

1.0 REGULATORY LIMITS

1.1 Fission and Activation Gas Release Limits

The dose rate due to radioactive materials released in gaseous effluents from the site to areas at and beyond the site boundary, shall be limited to the following:

For noble gases: Less than or equal to 500 mrems/yr to the total body and less than or equal to 3000 mrems/yr to the skin.

In addition, the air dose due to noble gases released in gaseous effluents, from each reactor unit, from the site to areas at and beyond the site boundary, shall be limited to the following:

During any calendar quarter: Less than or equal to 5 mrad for gamma radiation and less than or equal to 10 mrad for beta radiation, and

During any calendar year: Less than or equal to 10 mrad for gamma radiation and less than or equal to 20 mrad for beta radiation.

1.2 Iodine Particulates, and Tritium

The dose rate due to radioactive materials released in gaseous effluents from the site to areas at and beyond the site boundary, shall be limited to the following:

For Iodine-131, for tritium, and for all radionuclides in particulate form with half lives greater than 8 days: Less than or equal to 1500 mrems/yr to any organ.

In addition, the dose to a member of the public from Iodine-131, from tritium, and from all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released, from each reactor unit, from the site to areas at and beyond the site boundary, shall be limited to the following:

During any calendar quarter: Less than or equal to 7.5 mrems to any organ, and

During any calendar year: Less than or equal to 15 mrems to any organ.

1.3 Liquid Effluents Release Limits

The concentration of radioactive material released in liquid effluents to unrestricted areas shall be limited to the concentrations specified in 10 CFR, Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases, the concentration shall be limited to 2E-4 microcuries per milliliter.

In addition, the dose or dose commitment to a member of the public from radioactive materials in liquid effluents released to unrestricted areas shall be limited:

During any calendar quarter to less than or equal to 1.5 mrems to the total body and to less than or equal to 5 mrems to any organ, and

During any calendar year to less than or equal to 3 mrems to the total body and to less than or equal to 10 mrems to any organ.

1.4 Total Dose Limit

The annual (calendar year) dose or dose commitment to any member of the public, due to releases of radioactivity and radiation, from uranium fuel cycle sources shall be limited to less than or equal to 25 mrems to the total body or any organ (except the thyroid, which shall be limited to less than or equal to 75 mrems).

2.0 MAXIMUM PERMISSIBLE CONCENTRATIONS (MPC)

Regulatory Guide 1.21 requires that the licensee provide the MPCs used in determining allowable release rates for radioactive releases.

a. MPC values were not used to determine the maximum release rates for fission gases, iodines, or particulates from gaseous releases.

b. MPC values as stated in 10CFR20, Appendix B, Table II, Column 2 were used for liquids.

c. The MPC value used for dissolved or entrained noble gases is 2E-4 microcuries per milliliter.

3.0 AVERAGE ENERGY

Regulatory Guide 1.21 requires that the licensee provide the average energy of the radionuclide mixture in releases of fission and activation gases, if applicable.

Release limits for SGS are not based upon average energy, hence, this section does not apply.

4.0 MEASUREMENTS AND APPROXIMATION OF TOTAL RADIOACTIVITY

4.1 Liquid Effluents

Liquid effluents are monitored in accordance with Table 4.11-1 of the Technical Specifications. During the period of record, all batch liquid wastes from the chemical drain tank and the laundry and hot shower tanks were routed to the hold-up tanks for monitoring prior to release. Technical Specifications require these tanks to be uniformly mixed for sampling and analysis before being released. Batch releases are defined as releases from the waste monitor hold-up tank and the chemical and volume control tanks. Continuous liquid releases are defined as condensate releases from intermittent blowdown of the steam generators. Specific activities from analyses were multiplied by the volume of effluent discharged to the environment in order to estimate the total liquid activity discharged.

The detection requirements of Tables 4.11-1 of the Technical Specifications are achieved or exceeded. Radionuclides detected at concentrations below the Technical Specification detection limits (LLDs) are treated as being present. Radionuclides for which no activity was detected, while meeting the required LLDs, are treated as absent.

4.2 Gaseous Effluents

Gaseous effluent streams are monitored and sampled in accordance with Table 4.11-2 of the Technical Specifications. The plant vent is the final release point of all planned gaseous effluents and is continuously monitored by beta scintillator and high range GM tubes. The vent is also continuously sampled for iodine and particulates with a charcoal cartridge and filter paper. The filter and charcoal are changed weekly, and analyzed on a multi-channel analyzer in the laboratory.

Noble gas sampling is also performed on all gas decay tanks and containment purges prior to their release to the environment. The plant vent is sampled weekly for noble gases.

The detection requirements of Tables 4.11-1 and 4.11-2 of the Technical Specifications are achieved or exceeded. Radionuclides detected at concentrations below the Technical Specification detection limits (LLDs) are treated as being present. Radionuclides for which no activity was detected, while meeting the required LLDs, are treated as absent.

Continuous Mode gaseous releases are quantified by routine (monthly or weekly) sampling and isotopic analyses of the plant vent. Specific activities for each isotope detected are multiplied by the total vent flow volume for the entire sampling period in order to estimate the normal continuous release of radioactivity through the plant vent.

Slightly elevated plant vent radiation monitor readings are treated as continuous releases. The monitors response is converted to a "specific activity" using historical efficiency factors. The "specific activity" is multiplied by a default volume of effluent discharge to estimate the total activity discharged.

Batch Mode gaseous releases are quantified by sampling each gas decay tank or containment purge prior to discharge. Specific activities for each isotope are multiplied by the total volume of gas discharged for that batch.

Elevated plant vent radiation monitoring system readings while the channel is in an alarm state are treated as batch mode releases. If specific activity data from grab samples taken is not available, then the abnormal release is quantified by the use of the plant vent radiation monitors. The monitor's response is converted to a "specific activity" using historical efficiency factors. The "specific activity" is multiplied by the volume of effluent discharged while the channel was in an alarm state in order to estimate the total activity discharged.

4.3 Estimated Total Error

The estimated total error of reported liquid and solid releases is within 25%

The estimated total error of the reported continuous gaseous releases is within 50% when concentrations exceed detectable levels. This error is due primarily to variability of waste stream flow rates and changes in isotopic distributions of waste streams between sampling periods. The estimated total error of the reported batch gaseous releases is within 10%.

Error estimates for releases where sample activity is below the detectable concentration levels are not included since error estimates at the LLD are not defined.

5.0 BATCH RELEASES

Summaries of batch releases of gaseous and liquid effluents are provided in Tables 4A-1 and 4B-1 for Unit 1 and 4A-2 and 4B-2 for Unit 2.

6.0 UNPLANNED RELEASES

During this reporting period there were no unplanned releases of radioactivity from Salem Unit 1 or 2.

7.0 ELEVATED RADIATION MONITOR RESPONSES

During this reporting period, there were no elevated monitors readings on R16/R41.

8.0 MODIFICATION TO PREVIOUS RADIOACTIVE EFFLUENT RELEASE REPORTS

Our last report (RERR-42) did not include the quarterly Sr-89, Sr-90 and Fe-55 composite data for the second quarter of 1997. Amended pages to RERR-42 are included at the end of this report.

PART B. GASEOUS EFFLUENTS

See Summary Tables 1A-1 thru 1C for Salem Unit 1 Operations.
See Summary Tables 1A-2 thru 1C for Salem Unit 2 Operations.

PART C. LIQUID EFFLUENTS

See Summary Tables 2A-1 thru 2B for Salem Unit 1 Operations.
See Summary Tables 2A-2 thru 2B for Salem Unit 2 Operations.

PART D. SOLID WASTE

See Summary in Table 3.

PART E. RADIOLOGICAL IMPACT ON MAN

The calculated individual doses in this section are based on the controlling dose pathways and age groups as described below. The estimated dose represents the maximum radiation dose that could be received by a member of the general public. The population dose impact is based on historical site specific data i.e., food production, milk production, feed for milk animals and seafood production.

The doses were calculated using methods described in Regulatory Guide 1.109 and represent calculations for the 1996 calendar year. Individual doses from batch and continuous releases were calculated using the annual average historic meteorological dispersion coefficients as described in the Offsite Dose Calculation Manual. Population doses were calculated using the meteorological dispersion coefficients for the (2) six month reporting intervals.

Liquid Pathways (Units 1 & 2)

Type	Age Group	Location	Pathway
Total Body	Adult	Site Boundary	Seafood Ingestion
Organ	Adult	Site Boundary	Seafood Ingestion

Dose			Limit
Total Body	0.103	mrem	3 mrem
Organ (Liver)	0.147	mrem	10 mrem
Population (Total)	0.019	person-rem	N/A
Population (Average)	0.000004	mrem/person	N/A

Air Pathways (Units 1 & 2)

Type	Age Group	Location	Pathway
Total Body	All	Site Boundary	Direct Exposure
Skin	All	Site Boundary	Direct Exposure
Organ	Teenager	4.9 mi.,West	Milk, Ground Plane, Inhalation

Dose			Limit
Total Body ----------	3.89E-3	mrem	500 mrem/yr
Skin ----------	9.10E-3	mrem	3000 mrem/yr
Organ (Lung) ----------	1.59E-2	mrem	15 mrem
Population (Total) ---	5.49E-1	person-rem	N/A
Population (Average)--	1.22E-4	mrem/person	N/A

Direct Radiation

Direct radiation may be estimated by thermoluminescent dosimetric (TLD) measurements. One method for comparing TLD measurements is by comparison with preoperational data. It should be noted that the TLDs measure direct radiation from both the Salem and Hope Creek Generating Stations at Artificial Island, as well as natural background radiation.

TLD data for the six month reporting period is given below:

TLD	Location	Measurement
2S-2	0.3 mile	3.9 mrem/month
5S-1	0.9 mile	3.5 mrem/month

These values are interpreted to represent natural background. They are within the statistical variation associated with the pre-operational program results, which are: 3.7 mrem/month for location 2S-2, and 4.2 mrem/month for location 5S-1.

Total Dose

40CFR190 limits the total dose to members of the public due to radioactivity and radiation from uranium fuel cycle sources to:

<25 mrem total body or any organ
<75 mrem to the thyroid

for a calendar year. For Artificial Island, the major sources of dose are from liquid and gaseous effluents from the Salem and Hope Creek plants.

The following doses to members of the public have been calculated for the January - December 1997 reporting period:

3.300 mrem total body
0.430 mrem organ (GI-LLI)
0.097 mrem thyroid

Dose to Members of the Public Inside the Site Boundary.

In accordance with the requirements of Technical Specification 6.9.1.8, the dose to members of the public inside the site boundary has been calculated based on the following assumptions:

a. The most limiting member of the general public is the commercial food vendors.
b. The food vendors spend 7 hours per day on site.
c. The highest total body dose contribution is direct radiation received from Salem and Hope Creek operation.
d. The food vendors are located near the restricted area boundary
e. Occupancy coincides with batch gaseous effluent discharges

For the six month reporting period, the calculated doses are:

3.10E+00 mrem Total Body
1.60E-02 mrem Organ (Lung)
2.42E-02 mrem Thyroid

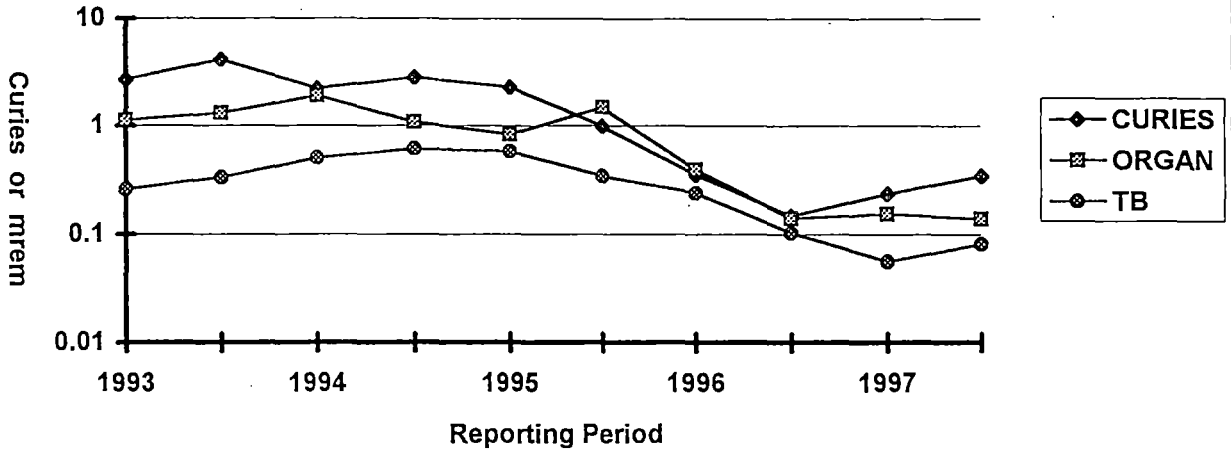
Assessment

Liquid and Gaseous effluents released from Salem increased from previous reporting period due to the startup of Unit 2 in the 4th quarter. Calculated doses from liquid effluents are due principally to isotopes of iron, cobalt and cesium. The dose from liquid and gaseous effluents to the maximum hypothetical individual were well below all applicable limits.

The following two trend graphs show the total curies of liquid and gaseous effluents released from Salem Units 1 and 2 for the past 5 years. Calculated doses in the graphs are to the maximum hypothetical individual.

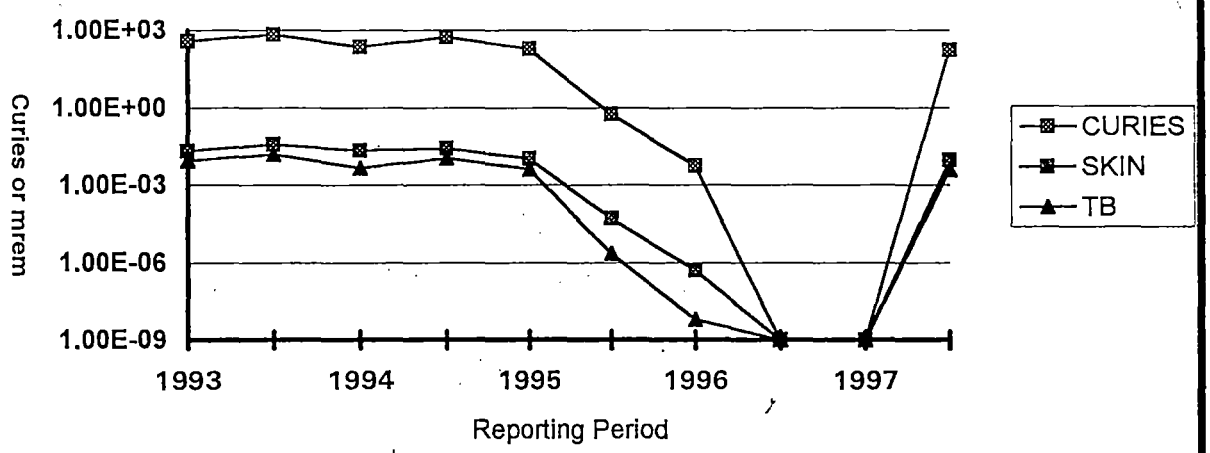
Salem Units 1 and 2
Liquid Effluents
Curies Released and Calculated Doses

Note: Calculated doses are to the maximum hypothetical individual



Salem Unit 1 and 2
Gaseous Effluents
Noble Gas Curies Released and Calculated Dose

Note : Calculated doses are to the maximum hypothetical individual



PART F. METEOROLOGICAL DATA

Cumulative joint wind frequency distributions by atmospheric stability class at the 300 foot elevation for 1997 are attached at the end of this report.

PART G. OFFSITE DOSE CALCULATION MANUAL (ODCM) CHANGES

During this period, there were no revisions to the SGS off-site dose calculation manual (ODCM).

PART H. INOPERABLE MONITORS

During this period, the following effluent monitors were inoperable for more than 30 days:

* Salem Unit 1

    a. Steam Generator Blowdown Process Radiation Monitors
    b. Steam Generator Blowdown Line Flow Rate Monitors
    c. Containment Fan Coil Unit Process Radiation Monitors
    d. Plant Vent Radiation Monitoring System - Noble Gas, Iodine, Particulate, Flow Rate, and Sample Flow Rate Monitors
    e. Liquid Radwaste Disposal Process Radiation Monitor
    f. Waste Gas Holdup System Oxygen Monitor
    g. Containment Noble Gas Activity Monitor

* Salem Unit 2

    a. Steam Generator Blowdown Process Radiation Monitors
    b. Steam Generator Blowdown Line Flow Rate Monitors
    c. Containment Fan Coil Unit Process Radiation Monitors
    f. Chemical Waste Basin Process Radiation Monitor
    g. Waste Gas Holdup System Oxygen Monitor

The Radiation Monitoring system instrumentation listed above have been inoperable during this report period due to the extended maintenance outage on Salem Unit 1 & 2. The Unit's have been shutdown since the 2nd quarter of 1995. Maintenance items conducted during this time period include the complete replacement of the Unit 1 Plant Vent Radiation Monitoring System; the replacement of Unit 1 Steam Generators, and extensive maintenance on the Unit 2 Waste Gas monitoring system. Additionally, the inability to establish sample stream flow due to the extended outage prevented restoring some of the radiation monitors to service. Since the startup of Unit 2, all Unit 2 radiation monitors have returned to service.

PART I. PROCESS CONTROL PROGRAM (PCP) CHANGES

During this reporting period, there were no changes to the Process Control Program.

PART J. ENVIRONMENTAL MONITORING LOCATION CHANGES

During the reporting period, there were no changes to the environmental monitoring sampling program.

PART K. MAJOR CHANGES TO THE WASTE PROCESSING SYSTEM

During this reporting period, there were no major changes to the radioactive waste processing system.

SALEM GENERATING STATION
TABLE 1A-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNIT 1
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	3rd Quarter	4th Quarter	Est. Total Error %
A. Fission and Activation Gases				
1. Total release	Ci	8.81E+00	2.52E-03	25
2. Average release rate for period	uCi/sec	1.12E+00	3.20E-04	
3. Percent of technical specification limit (T.S. 3.11.2.2(a))	%	6.45E-03	1.84E-06	
B. Iodines				
1. Total Iodine-131	Ci	0.00E+00	0.00E+00	25
2. Average release rate for period	uCi/sec	0.00E+00	0.00E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.45E-03	1.03E-03	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	8.27E-07	0.00E+00	25
2. Average release rate for period	uCi/sec	1.05E-07	0.00E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.45E-03	1.03E-03	
4. Gross alpha	Ci	0.00E+00	0.00E+00	
C. Tritium				
1. Total Release	Ci	5.34E+01	3.80E+01	25
2. Average release rate for period	uCi/sec	6.79E+00	4.84E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.45E-03	1.03E-03	

(1) For batch releases the estimated overall error is within 10%
(2) Iodine, tritium and particulates are treated as a group

SALEM GENERATING STATION
TABLE 1A-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNIT 2
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	3rd Quarter	4th Quarter	Est. Total Error %
A. Fission and Activation Gases				
1. Total release	Ci	9.12E-01	1.52E+02	25
2. Average release rate for period	uCi/sec	1.16E-01	1.93E+01	
3. Percent of technical specification limit (T.S. 3.11.2.2(a))	%	6.79E-04	1.17E-01	
B. Iodines				
1. Total Iodine-131	Ci	0.00E+00	6.93E-06	25
2. Average release rate for period	uCi/sec	0.00E+00	8.81E-07	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.74E-03	1.25E-03	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	0.00E+00	0.00E+00	25
2. Average release rate for period	uCi/sec	0.00E+00	0.00E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.74E-03	1.25E-03	
4. Gross alpha	Ci	0.00E+00	0.00E+00	
C. Tritium				
1. Total Release	Ci	6.41E+01	3.40E+01	25
2. Average release rate for period	uCi/sec	8.15E+00	4.33E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	1.74E-03	1.25E-03	

(1) For batch releases the estimated overall error is within 10%
(2) Iodine, tritium and particulates are treated as a group

SALEM GENERATING STATION
TABLE 1B-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
GASEOUS EFFLUENTS-ELEVATED RELEASES
UNIT 1

Nuclides Released	Unit	CONTINUOUS MODE 3rd Quarter	CONTINUOUS MODE 4th Quarter	BATCH MODE 3rd Quarter	BATCH MODE 4th Quarter
1. Fission Gases					
Xe-133	Ci	8.81E+00	0.00E+00	0.00E+00	2.52E-03
Totals	Ci	8.81E+00	0.00E+00	0.00E+00	2.52E-03
2. Iodines					
No Radioiodines were released during this time period					
3. Particulates (half-live >8 days)					
Cobalt-60	Ci	8.27E-07	0.00E+00	0.00E+00	0.00E+00
TOTALS	Ci	8.27E-07	0.00E+00	0.00E+00	0.00E+00

SALEM GENERATING STATION
TABLE 1B-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
GASEOUS EFFLUENTS-ELEVATED RELEASES
UNIT 2

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
1. Fission Gases					
Krypton-85	Ci	0.00E+00	0.00E+00	0.00E+00	4.34E-02
Krypton-85m	Ci	0.00E+00	0.00E+00	0.00E+00	1.11E-07
Xenon-131m	Ci	0.00E+00	0.00E+00	0.00E+00	8.61E-02
Xenon-133	Ci	3.05E-01	1.23E+02	5.90E-01	2.30E+01
Xenon-133m	Ci	0.00E+00	0.00E+00	8.94E-03	1.86E-01
Xenon-135	Ci	4.99E-03	5.51E+00	2.66E-03	4.53E-03
Totals	Ci	3.10E-01	1.23E+02	6.02E-01	2.34E+01
2. Iodines					
Iodine-131	Ci	0.00E+00	6.93E-06	0.00E+00	0.00E+00
Totals	Ci	0.00E+00	6.93E-06	0.00E+00	0.00E+00

3. Particulates
(half-lives >8 days)

No particulates were released during this reporting period

SALEM GENERATING STATION
TABLE 1C

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997

UNITS 1 AND 2

GASEOUS EFFLUENTS-GROUND-LEVEL RELEASES

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	3rd Quarter	4th Quarter	3rd Quarter	4th Quarter

There were no ground level gaseous releases during this reporting period.

SALEM GENERATING STATION
TABLE 2A-1
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNIT 1
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	3rd Quarter	4th Quarter	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	7.19E-02	7.85E-02	25
2. Average diluted concentration during period of release	uCi/mL	5.62E-08	5.66E-08	
3. Percent of technical specification limit (T.S. 3.11.1.2.(a))	%	1.33E+00	1.38E+00	
B. Tritium				
1. Total release	Ci	1.15E+00	2.35E+01	25
2. Average diluted concentration during period	uCi/mL	8.99E-07	1.69E-05	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	3.00E-02	5.64E-01	
C. Dissolved and entrained noble gases				
1. Total release	Ci	0.00E+00	0.00E+00	25
2. Average diluted concentration during period	uCi/mL	0.00E+00	0.00E+00	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	0.00E+00	0.00E+00	
D. Gross alpha activity				
1. Total release	Ci	0.00E+00	0.00E+00	25
E. Volume of waste release (prior to dilution - Batch Release)	liters	5.40E+05	6.24E+05	25
F. Volume of dilution water used during entire period	liters	9.61E+10	1.25E+11	25

SALEM GENERATING STATION
TABLE 2A-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNIT 2
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	3rd Quarter	4th Quarter	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	1.42E-01	5.24E-02	25
2. Average diluted concentration during period	uCi/mL	1.02E-07	3.64E-08	
3. Percent of technical specification limit (T.S. 3.11.1.2.(a))	%	3.28E+00	8.64E-01	
B. Tritium				
1. Total release	Ci	9.47E+00	1.49E+01	25
2. Average diluted concentration during period	uCi/mL	6.78E-06	1.04E-05	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	2.26E-01	3.45E-01	
C. Dissolved and entrained noble gases				
1. Total release	Ci	0.00E+00	0.00E+00	25
2. Average diluted concentration during period	uCi/mL	0.00E+00	0.00E+00	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	0.00E+00	0.00E+00	
D. Gross alpha activity				
1. Total release	Ci	0.00E+00	0.00E+00	25
E. Volume of waste release (prior to dilution - Batch Release)	liters	9.30E+05	6.13E+05	25
F. Volume of dilution water used during entire period	liters	3.73E+11	4.94E+11	25

SALEM GENERATING STATION
TABLE 2B-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997

LIQUID EFFLUENTS UNIT 1

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
Chromium-51	Ci	0.00E+00	0.00E+00	0.00E+00	2.35E-04
Manganese-54	Ci	0.00E+00	0.00E+00	6.00E-04	6.30E-04
Iron-55	Ci	0.00E+00	0.00E+00	2.21E-03	0.00E+00
Cobalt-57	Ci	0.00E+00	0.00E+00	2.01E-05	9.96E-05
Cobalt-58	Ci	0.00E+00	0.00E+00	3.84E-05	3.26E-04
Cobalt-60	Ci	0.00E+00	0.00E+00	9.91E-03	2.21E-02
Strontium-90	Ci	0.00E+00	0.00E+00	5.94E-05	0.00E+00
Niobium-97	Ci	0.00E+00	0.00E+00	3.87E-05	1.04E-04
Silver-110m	Ci	0.00E+00	0.00E+00	6.93E-05	2.55E-04
Antimony-125	Ci	0.00E+00	0.00E+00	8.28E-03	1.01E-02
Iodine-131	Ci	0.00E+00	0.00E+00	0.00E+00	8.82E-05
Cesium-134	Ci	0.00E+00	0.00E+00	1.46E-02	1.21E-02
Cesium-137	Ci	0.00E+00	0.00E+00	3.60E-02	3.25E-02
Cerium-141	Ci	0.00E+00	0.00E+00	0.00E+00	6.37E-06
TOTALS	Ci	0.00E+00	0.00E+00	7.19E-02	7.85E-02
Tritium	Ci	0.00E+00	0.00E+00	1.15E+00	2.35E+01
TOTALS	Ci	0.00E+00	0.00E+00	1.15E+00	2.35E+01

SALEM GENERATING STATION
TABLE 2B-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997

LIQUID EFFLUENTS UNIT 2

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
Manganese-54	Ci	0.00E+00	0.00E+00	8.61E-04	6.01E-04
Iron-55	Ci	0.00E+00	0.00E+00	1.02E-02	0.00E+00
Cobalt-58	Ci	0.00E+00	0.00E+00	0.00E+00	2.55E-04
Cobalt-60	Ci	0.00E+00	0.00E+00	1.82E-02	1.83E-02
Strontium-90	Ci	0.00E+00	0.00E+00	1.39E-04	0.00E+00
Niobium-97	Ci	0.00E+00	0.00E+00	7.22E-05	1.73E-04
Ruthinium-106	Ci	0.00E+00	0.00E+00	1.63E-04	0.00E+00
Antimony-125	Ci	0.00E+00	0.00E+00	1.11E-02	3.32E-03
Iodine-131	Ci	0.00E+00	0.00E+00	0.00E+00	2.32E-04
Cesium-134	Ci	0.00E+00	0.00E+00	3.00E-02	7.96E-03
Cesium-137	Ci	0.00E+00	0.00E+00	7.10E-02	2.15E-02
TOTALS	Ci	7.14E-04	0.00E+00	1.42E-01	5.24E-02
Tritium	Ci	0.00E+00	0.00E+00	9.47E+00	1.49E+01
TOTALS		0.00E+00	0.00E+00	9.47E+00	1.49E+01

SALEM GENERATING STATION
TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNITS 1 AND 2
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL
(Not irradiated fuel)

1. Type of waste		Units(1)	6-month period	Est. Total Error, %
a.	Spent resins, filters, sludges, evaporator bottoms	m3 Ci	0.00E+00 0.00E+00	25
b.	Dry compressible waste, contaminated equipment.	m3 Ci	3.99E+02 1.30E-01	25
c.	Irradiated components, control rods	m3 Ci	0.00E+00 0.00E+00	25
d.	Others (described) S/G Cleaning Material	m3 Ci	1.00E+01 2.40E+00	25

2. Estimate of major nuclide composition (for Type A and B waste)

	DAW		S/G Cleaning Material	
	(%)	(Ci)	(%)	(Ci)
Fe-55	37.2	4.80E-02	41.2	9.89E-01
Cs-134	20.7	2.70E-02	N/A	N/A
Ni-63	18.7	2.40E-02	8.5	2.04E-01
Cs-137	11.5	1.50E-02	N/A	N/A
Co-60	10.1	1.30E-02	48.0	1.15E+00
Ag-110m	1.0	1.00E-03	N/A	N/A
Mn-54	N/A	N/A	1.2	2.88E-02

SALEM GENERATING STATION
TABLE 3
(CONT'D)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
UNITS 1 AND 2
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

3. **Solid Waste Disposition**

Number of Shipments	Mode of Transportation	Destination	Type of Containers
8	Truck	Memphis, Tn	Strong, Tight

4. **IRRADIATED FUEL SHIPMENTS (Disposition)**

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

5. **Solidification Agents used:** None

SALEM GENERATING STATION
TABLE 4A-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 1

BATCH RELEASES ONLY

1. Dates: July 1 - September 30, 1997

2. Type of release: Gas

3. Number of releases during the 3rd Quarter: 6

4. Total time duration for all releases of type listed above:
   9.46E+02 minutes

5. Maximum duration for release of type listed above:
   2.32E+02 minutes

6. Average duration for release of type listed above:
   1.58E+02 minutes

7. Minimum duration for release of type listed above:
   6.50E+01 minutes

8. Average stream flow (dilution flow) during the period of release: N/A

SALEM GENERATING STATION
TABLE 4A-1
(CONT'D)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 1

BATCH RELEASES ONLY

1. Dates: October 1 - December 31, 1997

2. Type of release: Gas

3. Number of releases during the 4th Quarter: 13

4. Total time duration for all releases of type listed above: 5.34E+03 minutes

5. Maximum duration for release of type listed above: 1.43E+03 minutes

6. Average duration for release of type listed above: 4.11E+02 minutes

7. Minimum duration for release of type listed above: 1.00E+00 minutes

8. Average stream flow (dilution flow) during the period of release: N/A

SALEM GENERATING STATION
TABLE 4A-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 2

BATCH RELEASES ONLY

1. Dates: July 1 - September 30, 1997

2. Type of release: Gas

3. Number of releases during the 3rd Quarter: 23

4. Total time duration for all releases of type listed above: 4.06E+03 minutes

5. Maximum duration for release of type listed above: 9.09E+02 minutes

6. Average duration for release of type listed above: 1.76E+02 minutes

7. Minimum duration for release of type listed above: 2.00E+00 minutes

8. Average stream flow (dilution flow) during the period of release: N/A

SALEM GENERATING STATION
TABLE 4A-2
(CONT'D)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 2

BATCH RELEASES ONLY

1. Dates: October 1 - December 31, 1997

2. Type of release: Gas

3. Number of releases during the 4th Quarter: 23

4. Total time duration for all releases of type listed above: 3.30E+03 minutes

5. Maximum duration for release of type listed above: 4.28E+02 minutes

6. Average duration for release of type listed above: 1.43E+02 minutes

7. Minimum duration for release of type listed above: 1.00E+00 minutes

8. Average stream flow (dilution flow) during the period of release: N/A

SALEM GENERATING STATION
TABLE 4B-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 1

BATCH RELEASES ONLY

1. Dates: July 1 - September 30, 1997

2. Type of release: Liquid

3. Number of releases during the 3rd Quarter: 9

4. Total time duration for all releases of type listed above: 2.72E+03 minutes

5. Maximum duration for release of type listed above: 5.39E+02 minutes

6. Average duration for release of type listed above: 3.02E+02 minutes

7. Minimum duration for release of type listed above: 1.45E+02 minutes

8. Average stream flow (dilution flow) during the period of release: 1.24E+05 gpm

SALEM GENERATING STATION
TABLE 4B-1
(CONT'D)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 1

BATCH RELEASES ONLY

1. Dates: October 1 - December 31, 1997

2. Type of release: Liquid

3. Number of releases during the 4th Quarter: 11

4. Total time duration for all releases of type listed above: 3.09E+03 minutes

5. Maximum duration for release of type listed above: 4.00E+02 minutes

6. Average duration for release of type listed above: 2.81E+02 minutes

7. Minimum duration for release of type listed above: 6.00E+00 minutes

8. Average stream flow (dilution flow) during the period of release: 1.18E+05 gpm

SALEM GENERATING STATION
TABLE 4B-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 2

BATCH RELEASES ONLY

1. Dates: July 1 - September 30, 1997

2. Type of release: Liquid

3. Number of releases during the 3rd Quarter: 15

4. Total time duration for all releases of type listed above: 3.69E+03 minutes

5. Maximum duration for release of type listed above: 3.26E+02 minutes

6. Average duration for release of type listed above: 2.46E+02 minutes

7. Minimum duration for release of type listed above: 1.73E+02 minutes

8. Average stream flow (dilution flow) during the period of release: 1.00E+05 gpm

SALEM GENERATING STATION
TABLE 4B-2
(CONT'D)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JULY - DECEMBER 1997
SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE
UNIT 2

BATCH RELEASES ONLY

1. Dates: October 1 - December 31, 1997

2. Type of release: Liquid

3. Number of releases during the 4th Quarter: 10

4. Total time duration for all releases of type listed above: 2.74E+03 minutes

5. Maximum duration for release of type listed above: 3.59E+02 minutes

6. Average duration for release of type listed above: 2.74E+02 minutes

7. Minimum duration for release of type listed above: 2.02E+02 minutes

8. Average stream flow (dilution flow) during the period of release: 1.39E+05 gpm

AMENDMENT TO RERR - 42

PART E. RADIOLOGICAL IMPACT ON MAN

The calculated individual doses in this section are based on the controlling dose pathways and age groups as described below. The estimated dose represents the maximum radiation dose that could be received by a member of the general public.

The doses were calculated using methods described in Regulatory Guide 1.109 and represent calculations for the six month reporting interval. Individual doses from batch and continuous releases were calculated using the annual average historic meteorological dispersion coefficients as described in the Offsite Dose Calculation Manual.

Liquid Pathways (Units 1 & 2)

Type	Age Group	Location	Pathway
Total Body	Adult	Site Boundary	Seafood Ingestion
Organ	Adult	Site Boundary	Seafood Ingestion

Dose		Limit
Total Body ----------	0.082 mrem	3 mrem
Organ (GI-LLI) ------	0.141 mrem	10 mrem

Air Pathways (Units 1 & 2)

Type	Age Group	Location	Pathway
Total Body	All	Site Boundary	Direct Exposure
Skin	All	Site Boundary	Direct Exposure
Organ	Teenager	Site Boundary	Inhalation

Dose		Limit
Total Body ----------	1.53E-7 mrem	500 mrem/yr
Skin ----------	3.62E-7 mrem	3000 mrem/yr
Organ (Lung) --------	6.54E-2 mrem	10 mrem

SALEM GENERATING STATION
TABLE 1A-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JANUARY - JUNE 1997
UNIT 1
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	1st Quarter	2nd Quarter	Est. Total Error %
A. Fission and Activation Gases				
1. Total release	Ci	7.48-03	0.00E+00	25
2. Average release rate for period	uCi/sec	9.51E-04	0.00E+00	
3. Percent of technical specification limit (T.S. 3.11.2.2(a))	%	5.48E-06	0.00E+00	
B. Iodines				
1. Total Iodine-131	Ci	0.00E+00	0.00E+00	25
2. Average release rate for period	uCi/sec	0.00E+00	0.00E+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	6.48E-04	1.20E-03	
C. Particulates				
1. Particulates with half-lives >8 days	Ci	0.00E+00	7.10E-07	25
2. Average release rate for period	uCi/sec	0.00E+00	9.02E-08	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	6.48E-04	1.20E-03	
4. Gross alpha	Ci	0.00E+00	0.00E+00	
C. Tritium				
1. Total Release	Ci	2.39E+01	3.51E+01	25
2. Average release rate for period	uCi/sec	3.04E+00	4.46+00	
3. Percent of technical specification limit (2) (T.S. 3.11.2.3(a))	%	6.48E-04	1.20E-03	

(1) For batch releases the estimated overall error is within 10%
(2) Iodine, tritium and particulates are treated as a group

SALEM GENERATING STATION
TABLE 2A-1
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JANUARY - JUNE 1997
UNIT 1
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	1st Quarter	2nd Quarter	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	1.26E-01	1.59E-02	25
2. Average diluted concentration during period	uCi/mL	2.57E-07	9.63E-08	
3. Percent of technical specification limit (T.S. 3.11.1.2.(a))	%	3.05E+00	3.54E-01	
B. Tritium				
1. Total release	Ci	3.90E+00	1.36E+00	25
2. Average diluted concentration during period	uCi/mL	7.94E-06	8.24E-06	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	2.65E-01	2.75E-01	
C. Dissolved and entrained noble gases				
1. Total release	Ci	0.00E+00	0.00E+00	25
2. Average diluted concentration during period	uCi/mL	0.00E+00	0.00E+00	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	0.00E+00	0.00E+00	
D. Gross alpha activity				
1. Total release	Ci	0.00E+00	0.00E+00	25
E. Volume of waste release (prior to dilution - Batch Release)	liters	3.16E+05	1.27E+05	25
F. Volume of dilution water used during entire period	liters	2.08E+10	2.73E+10	25

SALEM GENERATING STATION
TABLE 2A-2
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JANUARY - JUNE 1997
UNIT 2
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	1st Quarter	2nd Quarter	Est. Total Error %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	7.33E-02	2.31E-02	25
2. Average diluted concentration during period	uCi/mL	1.80E-07	8.68E-08	
3. Percent of technical specification limit (T.S. 3.11.1.2.(a))	%	1.66E+00	3.98E-01	
B. Tritium				
1. Total release	Ci	3.69E+00	4.43E+00	25
2. Average diluted concentration during period	uCi/mL	9.07E-06	1.67E-05	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	3.02E-01	5.56E-01	
C. Dissolved and entrained noble gases				
1. Total release	Ci	0.00E+00	0.00E+00	25
2. Average diluted concentration during period	uCi/mL	0.00E+00	0.00E+00	
3. Percent of technical specification limit (T.S. 3.11.1.1)	%	0.00E+00	0.00E+00	
D. Gross alpha activity				
1. Total release	Ci	0.00E+00	0.00E+00	25
E. Volume of waste release (prior to dilution - Batch Release)	liters	3.07E+05	1.86E+05	25
F. Volume of dilution water used during entire period	liters	8.55E+10	1.05E+11	25

SALEM GENERATING STATION
TABLE 2B-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JANUARY - JUNE 1997
LIQUID EFFLUENTS UNIT 1

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
A. Fission Products					
Manganese-54	Ci	0.00E+00	0.00E+00	1.13E-03	2.21E-04
Iron-55	Ci	0.00E+00	0.00E+00	1.61E-02	5.22E-04
Cobalt-57	Ci	0.00E+00	0.00E+00	7.95E-05	2.33E-05
Cobalt-58	Ci	0.00E+00	0.00E+00	7.51E-04	1.97E-05
Cobalt-60	Ci	0.00E+00	0.00E+00	1.61E-02	2.50E-03
Strontium-90	Ci	0.00E+00	0.00E+00	3.48E-05	1.53E-05
Niobium-97	Ci	0.00E+00	0.00E+00	7.43E-05	0.00E+00
Silver-110m	Ci	0.00E+00	0.00E+00	7.30E-04	0.00E+00
Antimony-125	Ci	0.00E+00	0.00E+00	3.04E-03	1.42E-03
Cesium-134	Ci	0.00E+00	0.00E+00	2.71E-02	3.20E-03
Cesium-137	Ci	0.00E+00	0.00E+00	6.10E-02	8.01E-03
TOTALS	Ci	0.00E+00	0.00E+00	1.26E-01	1.59E-02
B. Tritium, Dissolved and Entrained Gases					
Hydrogen-3	Ci	0.00E+00	0.00E+00	3.90E+00	1.36E+00
TOTALS	Ci	0.00E+00	0.00E+00	3.90E+00	1.36E+00

SALEM GENERATING STATION
TABLE 2B-2

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
JANUARY - JUNE 1997
LIQUID EFFLUENTS UNIT 2

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
A. Fission Products					
Manganese-54	Ci	0.00E+00	0.00E+00	8.58E-04	7.37E-04
Iron-55	Ci	0.00E+00	0.00E+00	1.30E-02	1.25E-03
Cobalt-57	Ci	0.00E+00	0.00E+00	7.64E-05	4.72E-05
Cobalt-58	Ci	0.00E+00	0.00E+00	4.53E-04	1.55E-04
Cobalt-60	Ci	0.00E+00	0.00E+00	1.33E-02	9.79E-03
Strontium-90	Ci	0.00E+00	0.00E+00	2.71E-05	3.35E-05
Niobium-97	Ci	0.00E+00	0.00E+00	1.70E-05	0.00E+00
Silver-110m	Ci	0.00E+00	0.00E+00	3.20E-04	0.00E+00
Antimony-125	Ci	0.00E+00	0.00E+00	2.86E-03	1.97E-03
Cesium-134	Ci	0.00E+00	0.00E+00	1.31E-02	2.49E-03
Cesium-137	Ci	0.00E+00	0.00E+00	2.94E-02	6.54E-03
TOTALS	Ci	0.00E+00	0.00E+00	7.33E-02	2.31E-02
B. Tritium, Dissolved and Entrained Gases					
Hydrogen-3	Ci	0.00E+00	0.00E+00	3.69E+00	4.43E+00
TOTALS		0.00E+00	0.00E+00	3.69E+00	4.43E+00

METEROLOGICAL

DATA

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
NNE	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
E	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
ESE	0	0.0	0	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	1	0.0	0	0.0	0	0.0	2	0.1	0	0.0	3	0.1
SSE	0	0.0	0	0.0	0	0.0	1	0.0	3	0.1	0	0.0	0	0.0	4	0.2
S	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	0	0.0	0	0.0	3	0.1
SSW	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.1
SW	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
WSW	0	0.0	0	0.0	1	0.0	3	0.1	4	0.2	0	0.0	0	0.0	8	0.4
W	0	0.0	0	0.0	2	0.1	3	0.1	9	0.4	4	0.2	0	0.0	18	0.8
WNW	0	0.0	0	0.0	0	0.0	1	0.0	8	0.4	11	0.5	6	0.3	26	1.2
NW	0	0.0	0	0.0	1	0.0	2	0.1	13	0.6	8	0.4	4	0.2	28	1.3
NNW	0	0.0	0	0.0	0	0.0	5	0.2	4	0.2	0	0.0	1	0.0	10	0.5
	0	0.0	0	0.0	6	0.3	24	1.1	46	2.1	25	1.2	11	0.5	112	5.2

MEAN WIND SPEED: 16.3
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	3	0.1	7	0.3	0	0.0	0	0.0	0	0.0	10	0.5
NNE	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
NE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	0	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	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	2	0.1	1	0.0	0	0.0	0	0.0	1	0.0	4	0.2
SSE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	2	0.1
SSW	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	2	0.1	0	0.0	4	0.2
SW	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
WSW	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	7	0.3	0	0.0	9	0.4
W	0	0.0	0	0.0	1	0.0	3	0.1	3	0.1	6	0.3	3	0.1	16	0.7
WNW	0	0.0	0	0.0	2	0.1	3	0.1	5	0.2	6	0.3	4	0.2	20	0.9
NW	0	0.0	0	0.0	1	0.0	6	0.3	9	0.4	8	0.4	3	0.1	27	1.3
NNW	0	0.0	0	0.0	0	0.0	8	0.4	5	0.2	1	0.0	0	0.0	14	0.6
	0	0.0	2	0.1	12	0.6	33	1.5	25	1.2	30	1.4	11	0.5	113	5.2

MEAN WIND SPEED: 15.7
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	2	0.1	2	0.1	1	0.0	0	0.0	0	0.0	5	0.2
NNE	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
NE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	0	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	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
ESE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	2	0.1	3	0.1
SSE	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	1	0.0	0	0.0	3	0.1
S	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
SSW	0	0.0	0	0.0	0	0.0	4	0.2	1	0.0	2	0.1	0	0.0	7	0.3
SW	0	0.0	0	0.0	1	0.0	1	0.0	4	0.2	1	0.0	0	0.0	7	0.3
WSW	0	0.0	0	0.0	1	0.0	0	0.0	2	0.1	1	0.0	0	0.0	4	0.2
W	0	0.0	0	0.0	0	0.0	2	0.1	5	0.2	5	0.2	3	0.1	15	0.7
WNW	0	0.0	0	0.0	2	0.1	3	0.1	3	0.1	9	0.4	4	0.2	21	1.0
NW	0	0.0	0	0.0	0	0.0	8	0.4	4	0.2	5	0.2	0	0.0	17	0.8
NNW	0	0.0	0	0.0	0	0.0	2	0.1	1	0.0	0	0.0	0	0.0	3	0.1
	0	0.0	1	0.0	7	0.3	29	1.3	23	1.1	24	1.1	9	0.4	93	4.3

MEAN WIND SPEED: 15.7
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	3	0.1	10	0.5	5	0.2	7	0.3	12	0.6	3	0.1	40	1.9
NNE	0	0.0	0	0.0	4	0.2	13	0.6	17	0.8	4	0.2	0	0.0	38	1.8
NE	0	0.0	1	0.0	6	0.3	18	0.8	22	1.0	2	0.1	0	0.0	49	2.3
ENE	0	0.0	2	0.1	9	0.4	12	0.6	6	0.3	1	0.0	0	0.0	30	1.4
E	0	0.0	0	0.0	4	0.2	8	0.4	5	0.2	1	0.0	0	0.0	18	0.8
ESE	0	0.0	1	0.0	1	0.0	3	0.1	1	0.0	9	0.4	0	0.0	15	0.7
SE	0	0.0	1	0.0	5	0.2	4	0.2	9	0.4	13	0.6	7	0.3	39	1.8
SSE	0	0.0	2	0.1	9	0.4	4	0.2	11	0.5	7	0.3	0	0.0	33	1.5
S	0	0.0	1	0.0	2	0.1	16	0.7	23	1.1	4	0.2	0	0.0	46	2.1
SSW	0	0.0	2	0.1	6	0.3	13	0.6	9	0.4	0	0.0	0	0.0	30	1.4
SW	0	0.0	1	0.0	12	0.6	15	0.7	13	0.6	11	0.5	4	0.2	56	2.6
WSW	0	0.0	1	0.0	4	0.2	11	0.5	3	0.1	7	0.3	0	0.0	26	1.2
W	0	0.0	1	0.0	3	0.1	3	0.1	28	1.3	40	1.9	14	0.6	89	4.1
WNW	0	0.0	1	0.0	4	0.2	2	0.1	36	1.7	34	1.6	33	1.5	110	5.1
NW	0	0.0	1	0.0	0	0.0	11	0.5	29	1.3	39	1.8	49	2.3	129	6.0
NNW	0	0.0	0	0.0	2	0.1	5	0.2	6	0.3	9	0.4	2	0.1	24	1.1
	0	0.0	18	0.8	81	3.8	143	6.6	225	10.4	193	8.9	112	5.2	772	35.8

MEAN WIND SPEED: 16.7
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	4	0.2	8	0.4	15	0.7	4	0.2	0	0.0	31	1.4
NNE	0	0.0	1	0.0	2	0.1	4	0.2	10	0.5	2	0.1	0	0.0	19	0.9
NE	0	0.0	1	0.0	1	0.0	3	0.1	12	0.6	1	0.0	0	0.0	18	0.8
ENE	0	0.0	0	0.0	4	0.2	7	0.3	12	0.6	1	0.0	0	0.0	24	1.1
E	0	0.0	0	0.0	3	0.1	7	0.3	5	0.2	3	0.1	1	0.0	19	0.9
ESE	0	0.0	0	0.0	2	0.1	11	0.5	3	0.1	5	0.2	2	0.1	23	1.1
SE	0	0.0	0	0.0	0	0.0	3	0.1	6	0.3	4	0.2	9	0.4	22	1.0
SSE	0	0.0	2	0.1	8	0.4	9	0.4	3	0.1	11	0.5	1	0.0	34	1.6
S	0	0.0	3	0.1	4	0.2	10	0.5	17	0.8	7	0.3	1	0.0	42	1.9
SSW	0	0.0	0	0.0	3	0.1	12	0.6	32	1.5	14	0.6	13	0.6	74	3.4
SW	0	0.0	0	0.0	2	0.1	17	0.8	30	1.4	12	0.6	27	1.3	88	4.1
WSW	0	0.0	1	0.0	3	0.1	13	0.6	8	0.4	10	0.5	4	0.2	39	1.8
W	0	0.0	1	0.0	1	0.0	10	0.5	12	0.6	21	1.0	12	0.6	57	2.6
WNW	0	0.0	2	0.1	3	0.1	17	0.8	32	1.5	18	0.8	3	0.1	75	3.5
NW	0	0.0	0	0.0	1	0.0	17	0.8	72	3.3	50	2.3	9	0.4	149	6.9
NNW	0	0.0	2	0.1	3	0.1	14	0.6	21	1.0	20	0.9	9	0.4	69	3.2
	0	0.0	13	0.6	44	2.0	162	7.5	290	13.4	183	8.5	91	4.2	783	36.3

MEAN WIND SPEED: 16.6
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
NNE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	3	0.1	0	0.0	5	0.2
NE	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.1
ENE	0	0.0	1	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
E	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
ESE	0	0.0	2	0.1	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	3	0.1
SE	0	0.0	0	0.0	1	0.0	2	0.1	3	0.1	2	0.1	6	0.3	14	0.6
SSE	0	0.0	0	0.0	1	0.0	3	0.1	4	0.2	8	0.4	3	0.1	19	0.9
S	0	0.0	0	0.0	1	0.0	10	0.5	12	0.6	6	0.3	7	0.3	36	1.7
SSW	0	0.0	2	0.1	1	0.0	7	0.3	19	0.9	12	0.6	11	0.5	52	2.4
SW	0	0.0	0	0.0	1	0.0	2	0.1	14	0.6	25	1.2	5	0.2	47	2.2
WSW	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	9	0.4	1	0.0	12	0.6
W	0	0.0	0	0.0	0	0.0	4	0.2	2	0.1	1	0.0	0	0.0	7	0.3
WNW	0	0.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	3	0.1
NW	0	0.0	0	0.0	0	0.0	0	0.0	4	0.2	2	0.1	0	0.0	6	0.3
NNW	0	0.0	0	0.0	0	0.0	2	0.1	4	0.2	0	0.0	0	0.0	6	0.3
	0	0.0	8	0.4	11	0.5	34	1.6	64	3.0	68	3.2	33	1.5	218	10.1

MEAN WIND SPEED: 17.3
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ENE	0	0.0	0	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	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	2	0.1	3	0.1
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	3	0.1
SSE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	9	0.4	1	0.0	11	0.5
S	0	0.0	0	0.0	0	0.0	0	0.0	11	0.5	10	0.5	0	0.0	21	1.0
SSW	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1	3	0.1	0	0.0	6	0.3
SW	0	0.0	0	0.0	0	0.0	2	0.1	1	0.0	3	0.1	0	0.0	6	0.3
WSW	0	0.0	0	0.0	1	0.0	1	0.0	3	0.1	3	0.1	0	0.0	8	0.4
W	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	0	0.0	0	0.0	3	0.1
WNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NW	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
NNW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
	0	0.0	0	0.0	4	0.2	7	0.3	22	1.0	29	1.3	5	0.2	67	3.1

MEAN WIND SPEED: 18.0
MISSING: 0

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	3	0.1	20	0.9	23	1.1	25	1.2	16	0.7	3	0.1	90	4.2
NNE	0	0.0	1	0.0	7	0.3	24	1.1	28	1.3	9	0.4	0	0.0	69	3.2
NE	0	0.0	3	0.1	7	0.3	23	1.1	36	1.7	3	0.1	0	0.0	72	3.3
ENE	0	0.0	3	0.1	15	0.7	20	0.9	19	0.9	2	0.1	0	0.0	59	2.7
E	0	0.0	1	0.0	9	0.4	20	0.9	10	0.5	4	0.2	1	0.0	45	2.1
ESE	0	0.0	4	0.2	3	0.1	16	0.7	5	0.2	14	0.6	4	0.2	46	2.1
SE	0	0.0	1	0.0	9	0.4	11	0.5	18	0.8	22	1.0	27	1.3	88	4.1
SSE	0	0.0	5	0.2	19	0.9	18	0.8	22	1.0	36	1.7	5	0.2	105	4.9
S	0	0.0	4	0.2	8	0.4	37	1.7	67	3.1	27	1.3	8	0.4	151	7.0
SSW	0	0.0	4	0.2	12	0.6	38	1.8	64	3.0	33	1.5	24	1.1	175	8.1
SW	0	0.0	1	0.0	16	0.7	39	1.8	63	2.9	52	2.4	36	1.7	207	9.6
WSW	0	0.0	3	0.1	12	0.6	29	1.3	20	0.9	37	1.7	5	0.2	106	4.9
W	0	0.0	2	0.1	7	0.3	26	1.2	61	2.8	77	3.6	32	1.5	205	9.5
WNW	0	0.0	4	0.2	11	0.5	27	1.3	85	3.9	78	3.6	50	2.3	255	11.8
NW	0	0.0	1	0.0	5	0.2	44	2.0	131	6.1	112	5.2	65	3.0	358	16.6
NNW	0	0.0	2	0.1	5	0.2	37	1.7	41	1.9	30	1.4	12	0.6	127	5.9
	0	0.0	42	1.9	165	7.6	432	20.0	695	32.2	552	25.6	272	12.6	2158	100.0

MISSING HOURS: 2

MEAN WIND SPEED: 16.7

ARTIFICIAL ISLAND 1/97 - 3/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	3	0.1	20	0.9	23	1.1	25	1.2	16	0.7	3	0.1	90	4.2
NNE	0	0.0	1	0.0	7	0.3	24	1.1	28	1.3	9	0.4	0	0.0	69	3.2
NE	0	0.0	3	0.1	7	0.3	23	1.1	36	1.7	3	0.1	0	0.0	72	3.3
ENE	0	0.0	3	0.1	15	0.7	20	0.9	19	0.9	2	0.1	0	0.0	59	2.7
E	0	0.0	1	0.0	9	0.4	20	0.9	10	0.5	4	0.2	1	0.0	45	2.1
ESE	0	0.0	4	0.2	3	0.1	16	0.7	5	0.2	14	0.6	4	0.2	46	2.1
SE	0	0.0	1	0.0	9	0.4	11	0.5	18	0.8	22	1.0	27	1.3	88	4.1
SSE	0	0.0	5	0.2	19	0.9	18	0.8	22	1.0	36	1.7	5	0.2	105	4.9
S	0	0.0	4	0.2	8	0.4	37	1.7	67	3.1	27	1.3	8	0.4	151	7.0
SSW	0	0.0	4	0.2	12	0.6	38	1.8	64	3.0	33	1.5	24	1.1	175	8.1
SW	0	0.0	1	0.0	16	0.7	39	1.8	63	2.9	52	2.4	36	1.7	207	9.6
WSW	0	0.0	3	0.1	12	0.6	29	1.3	20	0.9	37	1.7	5	0.2	106	4.9
W	0	0.0	2	0.1	7	0.3	26	1.2	61	2.8	77	3.6	32	1.5	205	9.5
WNW	0	0.0	4	0.2	11	0.5	27	1.3	86	4.0	78	3.6	50	2.3	256	11.9
NW	0	0.0	1	0.0	5	0.2	44	2.0	132	6.1	112	5.2	65	3.0	359	16.6
NNW	0	0.0	2	0.1	5	0.2	37	1.7	41	1.9	30	1.4	12	0.6	127	5.9
	0	0.0	42	1.9	165	7.6	432	20.0	697	32.3	552	25.6	272	12.6	2160	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 16.7

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	2	0.1
NNE	0	0.0	0	0.0	0	0.0	2	0.1	7	0.3	0	0.0	0	0.0	9	0.4
NE	0	0.0	0	0.0	0	0.0	2	0.1	4	0.2	0	0.0	0	0.0	6	0.3
ENE	0	0.0	0	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	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	1	0.0	8	0.4	8	0.4	6	0.3	2	0.1	25	1.1
SSE	0	0.0	0	0.0	0	0.0	6	0.3	3	0.1	5	0.2	0	0.0	14	0.6
S	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSW	0	0.0	0	0.0	1	0.0	0	0.0	2	0.1	0	0.0	0	0.0	3	0.1
SW	0	0.0	0	0.0	6	0.3	6	0.3	2	0.1	0	0.0	0	0.0	14	0.6
WSW	0	0.0	0	0.0	1	0.0	9	0.4	9	0.4	3	0.1	0	0.0	22	1.0
W	0	0.0	0	0.0	2	0.1	2	0.1	7	0.3	11	0.5	1	0.0	23	1.1
WNW	0	0.0	0	0.0	5	0.2	5	0.2	9	0.4	7	0.3	4	0.2	30	1.4
NW	0	0.0	0	0.0	1	0.0	4	0.2	16	0.7	33	1.5	8	0.4	62	2.8
NNW	0	0.0	0	0.0	0	0.0	8	0.4	2	0.1	3	0.1	4	0.2	17	0.8
	0	0.0	0	0.0	17	0.8	53	2.4	71	3.3	68	3.1	19	0.9	228	10.4

MEAN WIND SPEED: 16.4
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
NNE	0	0.0	0	0.0	3	0.1	7	0.3	3	0.1	0	0.0	0	0.0	13	0.6
NE	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	0	0.0	0	0.0	3	0.1
ENE	0	0.0	0	0.0	2	0.1	4	0.2	0	0.0	0	0.0	0	0.0	6	0.3
E	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
SE	0	0.0	0	0.0	2	0.1	2	0.1	3	0.1	4	0.2	1	0.0	12	0.5
SSE	0	0.0	0	0.0	1	0.0	1	0.0	2	0.1	2	0.1	0	0.0	6	0.3
S	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
SSW	0	0.0	0	0.0	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	4	0.2
SW	0	0.0	0	0.0	1	0.0	1	0.0	4	0.2	1	0.0	0	0.0	7	0.3
WSW	0	0.0	0	0.0	1	0.0	2	0.1	6	0.3	0	0.0	1	0.0	10	0.5
W	0	0.0	0	0.0	2	0.1	4	0.2	3	0.1	0	0.0	4	0.2	13	0.6
WNW	0	0.0	0	0.0	7	0.3	3	0.1	2	0.1	5	0.2	3	0.1	20	0.9
NW	0	0.0	1	0.0	2	0.1	3	0.1	5	0.2	8	0.4	2	0.1	21	1.0
NNW	0	0.0	0	0.0	3	0.1	9	0.4	2	0.1	2	0.1	2	0.1	18	0.8
	0	0.0	2	0.1	29	1.3	41	1.9	32	1.5	23	1.1	13	0.6	140	6.4

MEAN WIND SPEED: 14.0
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM	PERCENT
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	1	0.0	5	0.2	0	0.0	0	0.0	0	0.0	6	0.3
NNE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	2	0.1	2	0.1	2	0.1	2	0.1	0	0.0	8	0.4
ENE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	2	0.1
ESE	0	0.0	2	0.1	1	0.0	2	0.1	0	0.0	0	0.0	0	0.0	5	0.2
SE	0	0.0	0	0.0	2	0.1	0	0.0	6	0.3	5	0.2	0	0.0	13	0.6
SSE	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	3	0.1	0	0.0	5	0.2
S	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.1
SSW	0	0.0	0	0.0	1	0.0	1	0.0	2	0.1	0	0.0	1	0.0	5	0.2
SW	0	0.0	1	0.0	2	0.1	0	0.0	3	0.1	2	0.1	0	0.0	8	0.4
WSW	0	0.0	0	0.0	1	0.0	4	0.2	5	0.2	0	0.0	0	0.0	10	0.5
W	0	0.0	0	0.0	1	0.0	2	0.1	4	0.2	6	0.3	1	0.0	14	0.6
WNW	0	0.0	0	0.0	1	0.0	2	0.1	2	0.1	4	0.2	1	0.0	10	0.5
NW	0	0.0	0	0.0	1	0.0	5	0.2	3	0.1	8	0.4	6	0.3	23	1.1
NNW	0	0.0	0	0.0	4	0.2	7	0.3	7	0.3	0	0.0	1	0.0	19	0.9
	0	0.0	3	0.1	20	0.9	32	1.5	37	1.7	30	1.4	10	0.5	132	6.0

MEAN WIND SPEED: 14.8
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	3	0.1	6	0.3	10	0.5	2	0.1	0	0.0	21	1.0
NNE	0	0.0	0	0.0	3	0.1	7	0.3	5	0.2	1	0.0	0	0.0	16	0.7
NE	0	0.0	0	0.0	5	0.2	9	0.4	7	0.3	17	0.8	0	0.0	38	1.7
ENE	0	0.0	0	0.0	7	0.3	4	0.2	1	0.0	11	0.5	0	0.0	23	1.1
E	0	0.0	0	0.0	4	0.2	4	0.2	3	0.1	0	0.0	0	0.0	11	0.5
ESE	0	0.0	2	0.1	5	0.2	2	0.1	4	0.2	2	0.1	2	0.1	17	0.8
SE	0	0.0	0	0.0	2	0.1	10	0.5	20	0.9	24	1.1	10	0.5	66	3.0
SSE	0	0.0	0	0.0	3	0.1	8	0.4	23	1.1	17	0.8	0	0.0	51	2.3
S	0	0.0	1	0.0	5	0.2	3	0.1	3	0.1	2	0.1	1	0.0	15	0.7
SSW	0	0.0	3	0.1	3	0.1	3	0.1	6	0.3	9	0.4	0	0.0	24	1.1
SW	0	0.0	0	0.0	8	0.4	3	0.1	11	0.5	4	0.2	4	0.2	30	1.4
WSW	0	0.0	0	0.0	4	0.2	7	0.3	11	0.5	6	0.3	1	0.0	29	1.3
W	0	0.0	1	0.0	3	0.1	5	0.2	8	0.4	6	0.3	4	0.2	27	1.2
WNW	0	0.0	2	0.1	4	0.2	7	0.3	11	0.5	21	1.0	6	0.3	51	2.3
NW	0	0.0	0	0.0	1	0.0	6	0.3	12	0.5	20	0.9	41	1.9	80	3.7
NNW	0	0.0	1	0.0	3	0.1	5	0.2	16	0.7	4	0.2	5	0.2	34	1.6
	0	0.0	10	0.5	63	2.9	89	4.1	151	6.9	146	6.7	74	3.4	533	24.4

MEAN WIND SPEED: 16.7
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	3	0.1	4	0.2	18	0.8	4	0.2	0	0.0	30	1.4
NNE	0	0.0	0	0.0	8	0.4	7	0.3	11	0.5	4	0.2	0	0.0	30	1.4
NE	0	0.0	3	0.1	4	0.2	7	0.3	11	0.5	7	0.3	1	0.0	33	1.5
ENE	0	0.0	1	0.0	13	0.6	9	0.4	3	0.1	1	0.0	0	0.0	27	1.2
E	0	0.0	1	0.0	8	0.4	8	0.4	0	0.0	0	0.0	0	0.0	17	0.8
ESE	0	0.0	1	0.0	8	0.4	14	0.6	9	0.4	1	0.0	1	0.0	34	1.6
SE	0	0.0	1	0.0	2	0.1	21	1.0	32	1.5	9	0.4	9	0.4	74	3.4
SSE	0	0.0	3	0.1	4	0.2	18	0.8	22	1.0	12	0.5	5	0.2	64	2.9
S	0	0.0	0	0.0	13	0.6	14	0.6	8	0.4	18	0.8	4	0.2	57	2.6
SSW	0	0.0	2	0.1	6	0.3	20	0.9	29	1.3	16	0.7	8	0.4	81	3.7
SW	0	0.0	1	0.0	8	0.4	23	1.1	37	1.7	24	1.1	2	0.1	95	4.4
WSW	0	0.0	1	0.0	5	0.2	17	0.8	22	1.0	5	0.2	0	0.0	50	2.3
W	0	0.0	1	0.0	3	0.1	10	0.5	10	0.5	7	0.3	1	0.0	32	1.5
WNW	0	0.0	3	0.1	1	0.0	23	1.1	14	0.6	23	1.1	7	0.3	71	3.3
NW	0	0.0	0	0.0	2	0.1	12	0.5	19	0.9	38	1.7	14	0.6	85	3.9
NNW	0	0.0	1	0.0	1	0.0	10	0.5	28	1.3	9	0.4	15	0.7	64	2.9
	0	0.0	20	0.9	89	4.1	217	9.9	273	12.5	178	8.2	67	3.1	844	38.7

MEAN WIND SPEED: 15.0
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	5	0.2	10	0.5	10	0.5	0	0.0	0	0.0	26	1.2
NNE	0	0.0	1	0.0	1	0.0	10	0.5	4	0.2	4	0.2	0	0.0	20	0.9
NE	0	0.0	1	0.0	0	0.0	0	0.0	5	0.2	2	0.1	0	0.0	8	0.4
ENE	0	0.0	0	0.0	1	0.0	3	0.1	2	0.1	0	0.0	0	0.0	6	0.3
E	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	2	0.1	1	0.0	3	0.1	0	0.0	0	0.0	6	0.3
SE	0	0.0	0	0.0	1	0.0	3	0.1	9	0.4	3	0.1	1	0.0	17	0.8
SSE	0	0.0	0	0.0	1	0.0	5	0.2	8	0.4	2	0.1	2	0.1	18	0.8
S	0	0.0	0	0.0	2	0.1	6	0.3	8	0.4	3	0.1	0	0.0	19	0.9
SSW	0	0.0	0	0.0	1	0.0	4	0.2	7	0.3	13	0.6	1	0.0	26	1.2
SW	0	0.0	0	0.0	1	0.0	3	0.1	19	0.9	6	0.3	1	0.0	30	1.4
WSW	0	0.0	1	0.0	0	0.0	4	0.2	15	0.7	10	0.5	0	0.0	30	1.4
W	0	0.0	1	0.0	0	0.0	1	0.0	5	0.2	2	0.1	0	0.0	9	0.4
WNW	0	0.0	1	0.0	3	0.1	5	0.2	0	0.0	0	0.0	0	0.0	9	0.4
NW	0	0.0	1	0.0	2	0.1	3	0.1	6	0.3	7	0.3	0	0.0	19	0.9
NNW	0	0.0	0	0.0	0	0.0	9	0.4	10	0.5	3	0.1	0	0.0	22	1.0
	0	0.0	7	0.3	21	1.0	67	3.1	111	5.1	55	2.5	5	0.2	266	12.2

MEAN WIND SPEED: 14.5
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	2	0.1	0	0.0	1	0.0	0	0.0	0	0.0	3	0.1
NNE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
ENE	0	0.0	0	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	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	2	0.1
SSE	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
S	0	0.0	0	0.0	0	0.0	2	0.1	1	0.0	3	0.1	0	0.0	6	0.3
SSW	0	0.0	0	0.0	1	0.0	0	0.0	3	0.1	1	0.0	0	0.0	5	0.2
SW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.2	0	0.0	4	0.2
WSW	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	1	0.0	0	0.0	4	0.2
W	0	0.0	1	0.0	2	0.1	2	0.1	1	0.0	0	0.0	0	0.0	6	0.3
WNW	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NW	0	0.0	1	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
	0	0.0	2	0.1	8	0.4	10	0.5	10	0.5	10	0.5	0	0.0	40	1.8

MEAN WIND SPEED: 12.7
MISSING: 0

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	2	0.1	14	0.6	25	1.1	41	1.9	7	0.3	0	0.0	89	4.1
NNE	0	0.0	1	0.0	16	0.7	33	1.5	31	1.4	9	0.4	0	0.0	90	4.1
NE	0	0.0	4	0.2	11	0.5	23	1.1	31	1.4	28	1.3	1	0.0	98	4.5
ENE	0	0.0	1	0.0	23	1.1	21	1.0	6	0.3	12	0.5	0	0.0	63	2.9
E	0	0.0	1	0.0	15	0.7	12	0.5	4	0.2	0	0.0	0	0.0	32	1.5
ESE	0	0.0	5	0.2	16	0.7	22	1.0	16	0.7	3	0.1	3	0.1	65	3.0
SE	0	0.0	1	0.0	10	0.5	44	2.0	80	3.7	51	2.3	23	1.1	209	9.6
SSE	0	0.0	3	0.1	10	0.5	40	1.8	59	2.7	41	1.9	7	0.3	160	7.3
S	0	0.0	2	0.1	22	1.0	27	1.2	20	0.9	26	1.2	5	0.2	102	4.7
SSW	0	0.0	5	0.2	16	0.7	29	1.3	49	2.2	39	1.8	10	0.5	148	6.8
SW	0	0.0	2	0.1	26	1.2	36	1.6	76	3.5	41	1.9	7	0.3	188	8.6
WSW	0	0.0	2	0.1	12	0.5	44	2.0	70	3.2	25	1.1	2	0.1	155	7.1
W	0	0.0	4	0.2	13	0.6	26	1.2	38	1.7	32	1.5	11	0.5	124	5.7
WNW	0	0.0	6	0.3	21	1.0	46	2.1	38	1.7	60	2.7	21	1.0	192	8.8
NW	0	0.0	3	0.1	11	0.5	33	1.5	61	2.8	114	5.2	71	3.3	293	13.4
NNW	0	0.0	2	0.1	11	0.5	48	2.2	65	3.0	22	1.0	27	1.2	175	8.0
	0	0.0	44	2.0	247	11.3	509	23.3	685	31.4	510	23.4	188	8.6	2183	100.0

MISSING HOURS: 1

MEAN WIND SPEED: 15.4

ARTIFICIAL ISLAND 4/97 - 6/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM	PERCENT
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	2	0.1	14	0.6	25	1.1	41	1.9	7	0.3	0	0.0	89	4.1
NNE	0	0.0	1	0.0	16	0.7	33	1.5	31	1.4	9	0.4	0	0.0	90	4.1
NE	0	0.0	4	0.2	11	0.5	23	1.1	31	1.4	28	1.3	1	0.0	98	4.5
ENE	0	0.0	1	0.0	23	1.1	21	1.0	6	0.3	12	0.5	0	0.0	63	2.9
E	0	0.0	1	0.0	15	0.7	12	0.5	4	0.2	0	0.0	0	0.0	32	1.5
ESE	0	0.0	5	0.2	16	0.7	22	1.0	16	0.7	3	0.1	3	0.1	65	3.0
SE	0	0.0	1	0.0	10	0.5	44	2.0	80	3.7	51	2.3	23	1.1	209	9.6
SSE	0	0.0	3	0.1	10	0.5	40	1.8	59	2.7	41	1.9	7	0.3	160	7.3
S	0	0.0	2	0.1	22	1.0	27	1.2	20	0.9	26	1.2	5	0.2	102	4.7
SSW	0	0.0	5	0.2	16	0.7	29	1.3	49	2.2	39	1.8	10	0.5	148	6.8
SW	0	0.0	2	0.1	26	1.2	36	1.6	76	3.5	41	1.9	7	0.3	188	8.6
WSW	0	0.0	2	0.1	12	0.5	44	2.0	70	3.2	25	1.1	2	0.1	155	7.1
W	0	0.0	4	0.2	13	0.6	26	1.2	38	1.7	32	1.5	11	0.5	124	5.7
WNW	0	0.0	6	0.3	21	1.0	46	2.1	38	1.7	60	2.7	21	1.0	192	8.8
NW	0	0.0	3	0.1	11	0.5	33	1.5	61	2.8	114	5.2	71	3.3	293	13.4
NNW	0	0.0	2	0.1	11	0.5	48	2.2	66	3.0	22	1.0	27	1.2	176	8.1
	0	0.0	44	2.0	247	11.3	509	23.3	686	31.4	510	23.4	188	8.6	2184	100.0

MISSING HOURS: 0

MEAN WIND SPEED: 15.4

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	3	0.1	0	0.0	1	0.0	0	0.0	0	0.0	4	0.2
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	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	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	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	2	0.1	2	0.1	4	0.2	2	0.1	0	0.0	10	0.5
SSE	0	0.0	0	0.0	2	0.1	3	0.1	4	0.2	3	0.1	0	0.0	12	0.6
S	0	0.0	0	0.0	7	0.3	4	0.2	0	0.0	0	0.0	0	0.0	11	0.5
SSW	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1
SW	0	0.0	0	0.0	5	0.2	2	0.1	2	0.1	0	0.0	0	0.0	9	0.4
WSW	0	0.0	0	0.0	15	0.7	8	0.4	0	0.0	1	0.0	1	0.0	25	1.2
W	0	0.0	2	0.1	4	0.2	8	0.4	7	0.3	5	0.2	3	0.1	29	1.3
WNW	0	0.0	0	0.0	2	0.1	0	0.0	2	0.1	0	0.0	2	0.1	6	0.3
NW	0	0.0	0	0.0	2	0.1	2	0.1	3	0.1	0	0.0	0	0.0	7	0.3
NNW	0	0.0	0	0.0	4	0.2	1	0.0	1	0.0	2	0.1	0	0.0	8	0.4
	0	0.0	2	0.1	50	2.3	30	1.4	24	1.1	13	0.6	6	0.3	125	5.8

MEAN WIND SPEED: 11.0
MISSING: 5

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	9	0.4	4	0.2	2	0.1	2	0.1	0	0.0	17	0.8
NNE	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
NE	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
ENE	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
E	0	0.0	0	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	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	1	0.0	2	0.1	3	0.1	0	0.0	2	0.1	0	0.0	8	0.4
SSE	0	0.0	1	0.0	4	0.2	4	0.2	3	0.1	0	0.0	0	0.0	12	0.6
S	0	0.0	1	0.0	5	0.2	3	0.1	1	0.0	0	0.0	0	0.0	10	0.5
SSW	0	0.0	0	0.0	1	0.0	1	0.0	2	0.1	0	0.0	0	0.0	4	0.2
SW	0	0.0	1	0.0	3	0.1	1	0.0	0	0.0	0	0.0	0	0.0	5	0.2
WSW	0	0.0	0	0.0	4	0.2	4	0.2	1	0.0	0	0.0	1	0.0	10	0.5
W	0	0.0	0	0.0	4	0.2	5	0.2	3	0.1	1	0.0	1	0.0	14	0.6
WNW	0	0.0	0	0.0	3	0.1	5	0.2	3	0.1	0	0.0	1	0.0	12	0.6
NW	0	0.0	1	0.0	5	0.2	11	0.5	4	0.2	0	0.0	0	0.0	21	1.0
NNW	0	0.0	0	0.0	5	0.2	5	0.2	6	0.3	5	0.2	0	0.0	21	1.0
	0	0.0	5	0.2	48	2.2	51	2.4	25	1.2	10	0.5	3	0.1	142	6.6

MEAN WIND SPEED: 10.3
MISSING: 8

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	13	0.6	13	0.6	6	0.3	1	0.0	0	0.0	33	1.5
NNE	0	0.0	0	0.0	4	0.2	2	0.1	0	0.0	0	0.0	0	0.0	6	0.3
NE	0	0.0	0	0.0	1	0.0	4	0.2	0	0.0	0	0.0	0	0.0	5	0.2
ENE	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	3	0.1
E	0	0.0	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.1
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	1	0.0	1	0.0	2	0.1	2	0.1	3	0.1	0	0.0	9	0.4
SSE	0	0.0	0	0.0	9	0.4	3	0.1	2	0.1	5	0.2	0	0.0	19	0.9
S	0	0.0	3	0.1	3	0.1	5	0.2	0	0.0	0	0.0	0	0.0	11	0.5
SSW	0	0.0	0	0.0	4	0.2	1	0.0	1	0.0	1	0.0	0	0.0	7	0.3
SW	0	0.0	1	0.0	2	0.1	5	0.2	0	0.0	0	0.0	0	0.0	8	0.4
WSW	0	0.0	0	0.0	2	0.1	0	0.0	3	0.1	0	0.0	0	0.0	5	0.2
W	0	0.0	0	0.0	4	0.2	5	0.2	4	0.2	0	0.0	1	0.0	14	0.6
WNW	0	0.0	0	0.0	6	0.3	9	0.4	4	0.2	1	0.0	0	0.0	20	0.9
NW	0	0.0	0	0.0	4	0.2	1	0.0	2	0.1	0	0.0	0	0.0	7	0.3
NNW	0	0.0	1	0.0	7	0.3	12	0.6	2	0.1	3	0.1	0	0.0	25	1.2
	0	0.0	7	0.3	60	2.8	66	3.1	26	1.2	14	0.6	1	0.0	174	8.0

MEAN WIND SPEED: 9.9
MISSING: 3

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	3	0.1	8	0.4	16	0.7	16	0.7	4	0.2	6	0.3	53	2.5
NNE	0	0.0	1	0.0	6	0.3	8	0.4	11	0.5	6	0.3	1	0.0	33	1.5
NE	0	0.0	3	0.1	4	0.2	11	0.5	8	0.4	12	0.6	0	0.0	38	1.8
ENE	0	0.0	2	0.1	2	0.1	5	0.2	15	0.7	6	0.3	4	0.2	34	1.6
E	0	0.0	2	0.1	1	0.0	7	0.3	4	0.2	4	0.2	0	0.0	18	0.8
ESE	0	0.0	1	0.0	1	0.0	1	0.0	2	0.1	8	0.4	1	0.0	14	0.6
SE	0	0.0	3	0.1	3	0.1	10	0.5	9	0.4	5	0.2	3	0.1	33	1.5
SSE	0	0.0	3	0.1	6	0.3	14	0.6	45	2.1	27	1.2	2	0.1	97	4.5
S	0	0.0	6	0.3	13	0.6	25	1.2	40	1.9	6	0.3	0	0.0	90	4.2
SSW	0	0.0	1	0.0	10	0.5	23	1.1	11	0.5	2	0.1	0	0.0	47	2.2
SW	0	0.0	2	0.1	3	0.1	10	0.5	13	0.6	2	0.1	1	0.0	31	1.4
WSW	0	0.0	0	0.0	4	0.2	8	0.4	13	0.6	3	0.1	8	0.4	36	1.7
W	0	0.0	0	0.0	5	0.2	12	0.6	12	0.6	0	0.0	2	0.1	31	1.4
WNW	0	0.0	1	0.0	12	0.6	7	0.3	7	0.3	3	0.1	0	0.0	30	1.4
NW	0	0.0	1	0.0	6	0.3	9	0.4	10	0.5	3	0.1	0	0.0	29	1.3
NNW	0	0.0	0	0.0	13	0.6	21	1.0	11	0.5	3	0.1	0	0.0	48	2.2
	0	0.0	29	1.3	97	4.5	187	8.6	227	10.5	94	4.3	28	1.3	662	30.6

MEAN WIND SPEED: 13.1
MISSING: 21

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	3	0.1	4	0.2	7	0.3	23	1.1	14	0.6	6	0.3	57	2.6
NNE	0	0.0	1	0.0	8	0.4	12	0.6	14	0.6	2	0.1	0	0.0	37	1.7
NE	0	0.0	1	0.0	2	0.1	8	0.4	10	0.5	2	0.1	0	0.0	23	1.1
ENE	0	0.0	1	0.0	1	0.0	7	0.3	16	0.7	1	0.0	0	0.0	26	1.2
E	0	0.0	0	0.0	4	0.2	19	0.9	8	0.4	1	0.0	0	0.0	32	1.5
ESE	0	0.0	0	0.0	2	0.1	4	0.2	6	0.3	8	0.4	2	0.1	22	1.0
SE	0	0.0	1	0.0	2	0.1	5	0.2	9	0.4	4	0.2	1	0.0	22	1.0
SSE	0	0.0	1	0.0	6	0.3	16	0.7	13	0.6	7	0.3	0	0.0	43	2.0
S	0	0.0	2	0.1	13	0.6	12	0.6	17	0.8	3	0.1	0	0.0	47	2.2
SSW	0	0.0	3	0.1	9	0.4	20	0.9	29	1.3	19	0.9	4	0.2	84	3.9
SW	0	0.0	3	0.1	11	0.5	18	0.8	42	1.9	17	0.8	3	0.1	94	4.3
WSW	0	0.0	2	0.1	10	0.5	14	0.6	32	1.5	5	0.2	0	0.0	63	2.9
W	0	0.0	5	0.2	16	0.7	17	0.8	20	0.9	5	0.2	0	0.0	63	2.9
WNW	0	0.0	1	0.0	15	0.7	20	0.9	15	0.7	2	0.1	1	0.0	54	2.5
NW	0	0.0	1	0.0	4	0.2	42	1.9	16	0.7	5	0.2	0	0.0	68	3.1
NNW	0	0.0	0	0.0	12	0.6	31	1.4	28	1.3	10	0.5	2	0.1	83	3.8
	0	0.0	25	1.2	119	5.5	252	11.7	298	13.8	105	4.9	19	0.9	818	37.8

MEAN WIND SPEED: 12.9
MISSING: 6

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	3	0.1	4	0.2	5	0.2	5	0.2	0	0.0	17	0.8
NNE	0	0.0	1	0.0	3	0.1	1	0.0	1	0.0	7	0.3	0	0.0	13	0.6
NE	0	0.0	0	0.0	2	0.1	5	0.2	2	0.1	0	0.0	0	0.0	9	0.4
ENE	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	2	0.1	0	0.0	5	0.2
E	0	0.0	1	0.0	0	0.0	0	0.0	4	0.2	0	0.0	0	0.0	5	0.2
ESE	0	0.0	2	0.1	2	0.1	0	0.0	1	0.0	2	0.1	0	0.0	7	0.3
SE	0	0.0	0	0.0	3	0.1	4	0.2	2	0.1	0	0.0	0	0.0	9	0.4
SSE	0	0.0	2	0.1	3	0.1	6	0.3	1	0.0	0	0.0	0	0.0	12	0.6
S	0	0.0	0	0.0	2	0.1	2	0.1	0	0.0	0	0.0	0	0.0	4	0.2
SSW	0	0.0	1	0.0	0	0.0	5	0.2	4	0.2	3	0.1	0	0.0	13	0.6
SW	0	0.0	1	0.0	0	0.0	4	0.2	15	0.7	1	0.0	0	0.0	21	1.0
WSW	0	0.0	1	0.0	1	0.0	5	0.2	12	0.6	2	0.1	0	0.0	21	1.0
W	0	0.0	0	0.0	4	0.2	10	0.5	8	0.4	2	0.1	0	0.0	24	1.1
WNW	0	0.0	0	0.0	7	0.3	8	0.4	1	0.0	0	0.0	0	0.0	16	0.7
NW	0	0.0	1	0.0	7	0.3	9	0.4	6	0.3	2	0.1	0	0.0	25	1.2
NNW	0	0.0	0	0.0	6	0.3	11	0.5	15	0.7	3	0.1	0	0.0	35	1.6
	0	0.0	10	0.5	43	2.0	75	3.5	79	3.7	29	1.3	0	0.0	236	10.9

MEAN WIND SPEED: 11.8
MISSING: 1

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
E	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
WSW	0	0.0	0	0.0	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	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
WNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	3	0.1	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	5	0.2

MEAN WIND SPEED: 4.2
MISSING: 0

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	6	0.3	40	1.9	44	2.0	53	2.5	26	1.2	12	0.6	181	8.4
NNE	0	0.0	3	0.1	25	1.2	23	1.1	26	1.2	15	0.7	1	0.0	93	4.3
NE	0	0.0	4	0.2	9	0.4	30	1.4	20	0.9	14	0.6	0	0.0	77	3.6
ENE	0	0.0	3	0.1	3	0.1	19	0.9	33	1.5	9	0.4	4	0.2	71	3.3
E	0	0.0	5	0.2	6	0.3	27	1.2	16	0.7	5	0.2	0	0.0	59	2.7
ESE	0	0.0	4	0.2	6	0.3	5	0.2	9	0.4	18	0.8	3	0.1	45	2.1
SE	0	0.0	6	0.3	13	0.6	26	1.2	26	1.2	16	0.7	4	0.2	91	4.2
SSE	0	0.0	8	0.4	30	1.4	46	2.1	68	3.1	42	1.9	2	0.1	196	9.1
S	0	0.0	12	0.6	43	2.0	51	2.4	58	2.7	9	0.4	0	0.0	173	8.0
SSW	0	0.0	5	0.2	27	1.2	50	2.3	47	2.2	25	1.2	4	0.2	158	7.3
SW	0	0.0	8	0.4	24	1.1	40	1.9	72	3.3	20	0.9	4	0.2	168	7.8
WSW	0	0.0	3	0.1	36	1.7	39	1.8	61	2.8	11	0.5	10	0.5	160	7.4
W	0	0.0	7	0.3	37	1.7	57	2.6	54	2.5	13	0.6	7	0.3	175	8.1
WNW	0	0.0	2	0.1	45	2.1	49	2.3	32	1.5	6	0.3	4	0.2	138	6.4
NW	0	0.0	4	0.2	28	1.3	74	3.4	41	1.9	10	0.5	0	0.0	157	7.3
NNW	0	0.0	1	0.0	47	2.2	81	3.7	63	2.9	26	1.2	2	0.1	220	10.2
	0	0.0	81	3.7	419	19.4	661	30.6	679	31.4	265	12.3	57	2.6	2162	100.0

MISSING HOURS: 46

MEAN WIND SPEED: 12.3

ARTIFICIAL ISLAND 7/97 - 9/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM	PERCENT
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	6	0.3	40	1.8	44	2.0	53	2.4	26	1.2	12	0.6	181	8.4
NNE	0	0.0	3	0.1	25	1.2	23	1.1	26	1.2	15	0.7	1	0.0	93	4.3
NE	0	0.0	4	0.2	10	0.5	30	1.4	20	0.9	14	0.6	0	0.0	78	3.6
ENE	0	0.0	3	0.1	3	0.1	19	0.9	33	1.5	9	0.4	4	0.2	71	3.3
E	0	0.0	5	0.2	6	0.3	27	1.2	16	0.7	5	0.2	0	0.0	59	2.7
ESE	0	0.0	4	0.2	6	0.3	5	0.2	9	0.4	18	0.8	3	0.1	45	2.1
SE	0	0.0	6	0.3	13	0.6	26	1.2	26	1.2	16	0.7	4	0.2	91	4.2
SSE	0	0.0	8	0.4	30	1.4	46	2.1	68	3.1	42	1.9	2	0.1	196	9.1
S	0	0.0	12	0.6	43	2.0	51	2.4	58	2.7	9	0.4	0	0.0	173	8.0
SSW	0	0.0	5	0.2	27	1.2	50	2.3	47	2.2	25	1.2	4	0.2	158	7.3
SW	0	0.0	8	0.4	24	1.1	40	1.8	72	3.3	20	0.9	4	0.2	168	7.8
WSW	0	0.0	3	0.1	36	1.7	39	1.8	61	2.8	11	0.5	10	0.5	160	7.4
W	0	0.0	7	0.3	37	1.7	57	2.6	54	2.5	13	0.6	7	0.3	175	8.1
WNW	0	0.0	2	0.1	45	2.1	49	2.3	32	1.5	6	0.3	4	0.2	138	6.4
NW	0	0.0	4	0.2	28	1.3	74	3.4	41	1.9	10	0.5	0	0.0	157	7.3
NNW	0	0.0	1	0.0	48	2.2	81	3.7	63	2.9	26	1.2	2	0.1	221	10.2
	0	0.0	81	3.7	421	19.5	661	30.5	679	31.4	265	12.2	57	2.6	2164	100.0

MISSING HOURS: 44

MEAN WIND SPEED: 12.3

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: LE -1.9 DEG C/100M
CLASS A

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENE	0	0.0	0	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	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SE	0	0.0	0	0.0	2	0.1	3	0.1	1	0.0	0	0.0	0	0.0	6	0.3
SSE	0	0.0	0	0.0	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0	5	0.2
S	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSW	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
SW	0	0.0	0	0.0	0	0.0	6	0.3	1	0.0	0	0.0	0	0.0	7	0.3
WSW	0	0.0	0	0.0	1	0.0	3	0.1	3	0.1	0	0.0	0	0.0	7	0.3
W	0	0.0	0	0.0	0	0.0	3	0.1	6	0.3	2	0.1	0	0.0	11	0.5
WNW	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	2	0.1	0	0.0	5	0.2
NW	0	0.0	0	0.0	0	0.0	1	0.0	2	0.1	4	0.2	2	0.1	9	0.4
NNW	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	3	0.1	25	1.1	14	0.6	8	0.4	2	0.1	52	2.4

MEAN WIND SPEED: 13.7
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.8 TO -1.7 DEG C/100M
CLASS B

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	0	0.0	4	0.2	0	0.0	0	0.0	0	0.0	5	0.2
NNE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
NE	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
ENE	0	0.0	0	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	0.0	0	0.0
ESE	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SSW	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
SW	0	0.0	0	0.0	2	0.1	3	0.1	0	0.0	0	0.0	0	0.0	5	0.2
WSW	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
W	0	0.0	0	0.0	3	0.1	2	0.1	8	0.4	2	0.1	0	0.0	15	0.7
WNW	0	0.0	0	0.0	2	0.1	6	0.3	6	0.3	3	0.1	4	0.2	21	1.0
NW	0	0.0	0	0.0	3	0.1	3	0.1	8	0.4	4	0.2	9	0.4	27	1.2
NNW	0	0.0	0	0.0	0	0.0	2	0.1	4	0.2	2	0.1	1	0.0	9	0.4
	0	0.0	1	0.0	13	0.6	24	1.1	28	1.3	11	0.5	14	0.6	91	4.1

MEAN WIND SPEED: 15.1
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.6 TO -1.5 DEG C/100M
CLASS C

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	1	0.0	4	0.2	2	0.1	0	0.0	0	0.0	7	0.3
NNE	0	0.0	1	0.0	0	0.0	4	0.2	1	0.0	0	0.0	0	0.0	6	0.3
NE	0	0.0	0	0.0	2	0.1	2	0.1	0	0.0	0	0.0	0	0.0	4	0.2
ENE	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
E	0	0.0	0	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	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	1	0.0	0	0.0	1	0.0	2	0.1	1	0.0	0	0.0	5	0.2
SSE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
S	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SSW	0	0.0	1	0.0	2	0.1	0	0.0	2	0.1	0	0.0	0	0.0	5	0.2
SW	0	0.0	0	0.0	3	0.1	2	0.1	2	0.1	0	0.0	0	0.0	7	0.3
WSW	0	0.0	1	0.0	1	0.0	0	0.0	3	0.1	0	0.0	0	0.0	5	0.2
W	0	0.0	0	0.0	2	0.1	4	0.2	8	0.4	3	0.1	0	0.0	17	0.8
WNW	0	0.0	0	0.0	2	0.1	2	0.1	2	0.1	7	0.3	2	0.1	15	0.7
NW	0	0.0	0	0.0	1	0.0	3	0.1	7	0.3	6	0.3	12	0.5	29	1.3
NNW	0	0.0	0	0.0	5	0.2	5	0.2	0	0.0	1	0.0	1	0.0	12	0.5
	0	0.0	4	0.2	21	1.0	27	1.2	30	1.4	18	0.8	15	0.7	115	5.2

MEAN WIND SPEED: 14.4
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -1.4 TO -0.5 DEG C/100M
CLASS D

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	4	0.2	12	0.5	27	1.2	25	1.1	7	0.3	76	3.4
NNE	0	0.0	0	0.0	6	0.3	31	1.4	37	1.7	12	0.5	0	0.0	86	3.9
NE	0	0.0	2	0.1	11	0.5	17	0.8	20	0.9	15	0.7	18	0.8	83	3.8
ENE	0	0.0	1	0.0	3	0.1	11	0.5	14	0.6	6	0.3	10	0.5	45	2.0
E	0	0.0	1	0.0	2	0.1	4	0.2	4	0.2	1	0.0	0	0.0	12	0.5
ESE	0	0.0	1	0.0	2	0.1	5	0.2	1	0.0	1	0.0	0	0.0	10	0.5
SE	0	0.0	2	0.1	4	0.2	2	0.1	5	0.2	8	0.4	0	0.0	21	1.0
SSE	0	0.0	0	0.0	8	0.4	7	0.3	8	0.4	2	0.1	0	0.0	25	1.1
S	0	0.0	0	0.0	4	0.2	7	0.3	6	0.3	2	0.1	2	0.1	21	1.0
SSW	0	0.0	0	0.0	5	0.2	17	0.8	11	0.5	0	0.0	0	0.0	33	1.5
SW	0	0.0	1	0.0	1	0.0	6	0.3	3	0.1	5	0.2	1	0.0	17	0.8
WSW	0	0.0	2	0.1	2	0.1	10	0.5	9	0.4	4	0.2	7	0.3	34	1.5
W	0	0.0	1	0.0	3	0.1	15	0.7	49	2.2	32	1.5	7	0.3	107	4.9
WNW	0	0.0	0	0.0	4	0.2	27	1.2	36	1.6	53	2.4	9	0.4	129	5.9
NW	0	0.0	0	0.0	9	0.4	19	0.9	27	1.2	31	1.4	10	0.5	96	4.4
NNW	0	0.0	0	0.0	2	0.1	10	0.5	13	0.6	7	0.3	7	0.3	39	1.8
	0	0.0	12	0.5	70	3.2	200	9.1	270	12.2	204	9.3	78	3.5	834	37.8

MEAN WIND SPEED: 16.0
MISSING: 1

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: -0.4 TO 1.5 DEG C/100M
CLASS E

WIND SPEED GROUPS (MPH)

	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	2	0.1	3	0.1	13	0.6	26	1.2	5	0.2	1	0.0	50	2.3
NNE	0	0.0	0	0.0	5	0.2	12	0.5	25	1.1	2	0.1	0	0.0	44	2.0
NE	0	0.0	0	0.0	8	0.4	22	1.0	14	0.6	9	0.4	4	0.2	57	2.6
ENE	0	0.0	0	0.0	3	0.1	9	0.4	14	0.6	2	0.1	0	0.0	28	1.3
E	0	0.0	5	0.2	4	0.2	13	0.6	2	0.1	1	0.0	0	0.0	25	1.1
ESE	0	0.0	1	0.0	4	0.2	5	0.2	6	0.3	4	0.2	1	0.0	21	1.0
SE	0	0.0	3	0.1	4	0.2	8	0.4	16	0.7	9	0.4	3	0.1	43	2.0
SSE	0	0.0	0	0.0	7	0.3	15	0.7	13	0.6	6	0.3	1	0.0	42	1.9
S	0	0.0	1	0.0	5	0.2	14	0.6	35	1.6	6	0.3	0	0.0	61	2.8
SSW	0	0.0	0	0.0	7	0.3	13	0.6	27	1.2	9	0.4	1	0.0	57	2.6
SW	0	0.0	2	0.1	5	0.2	17	0.8	42	1.9	6	0.3	1	0.0	73	3.3
WSW	0	0.0	2	0.1	2	0.1	8	0.4	19	0.9	3	0.1	2	0.1	36	1.6
W	0	0.0	5	0.2	5	0.2	22	1.0	20	0.9	2	0.1	1	0.0	55	2.5
WNW	0	0.0	3	0.1	4	0.2	20	0.9	32	1.5	7	0.3	0	0.0	66	3.0
NW	0	0.0	1	0.0	4	0.2	23	1.0	58	2.6	26	1.2	0	0.0	112	5.1
NNW	0	0.0	1	0.0	11	0.5	17	0.8	30	1.4	18	0.8	1	0.0	78	3.5
	0	0.0	26	1.2	81	3.7	231	10.5	379	17.2	115	5.2	16	0.7	848	38.5

MEAN WIND SPEED: 13.7
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: 1.6 TO 4.0 DEG C/100M
CLASS F

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	1	0.0	2	0.1	7	0.3	9	0.4	6	0.3	0	0.0	25	1.1
NNE	0	0.0	0	0.0	4	0.2	1	0.0	2	0.1	2	0.1	0	0.0	9	0.4
NE	0	0.0	2	0.1	1	0.0	2	0.1	5	0.2	1	0.0	0	0.0	11	0.5
ENE	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	2	0.1
E	0	0.0	3	0.1	1	0.0	2	0.1	4	0.2	0	0.0	0	0.0	10	0.5
ESE	0	0.0	1	0.0	0	0.0	1	0.0	5	0.2	0	0.0	0	0.0	7	0.3
SE	0	0.0	0	0.0	2	0.1	6	0.3	3	0.1	0	0.0	1	0.0	12	0.5
SSE	0	0.0	2	0.1	4	0.2	9	0.4	3	0.1	1	0.0	1	0.0	20	0.9
S	0	0.0	1	0.0	6	0.3	3	0.1	6	0.3	0	0.0	0	0.0	16	0.7
SSW	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0	3	0.1
SW	0	0.0	1	0.0	2	0.1	2	0.1	6	0.3	2	0.1	0	0.0	13	0.6
WSW	0	0.0	1	0.0	0	0.0	6	0.3	10	0.5	6	0.3	0	0.0	23	1.0
W	0	0.0	2	0.1	1	0.0	4	0.2	5	0.2	1	0.0	0	0.0	13	0.6
WNW	0	0.0	1	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0	4	0.2
NW	0	0.0	1	0.0	1	0.0	2	0.1	1	0.0	0	0.0	0	0.0	5	0.2
NNW	0	0.0	1	0.0	2	0.1	8	0.4	6	0.3	5	0.2	0	0.0	22	1.0
	0	0.0	17	0.8	27	1.2	56	2.5	68	3.1	25	1.1	2	0.1	195	8.8

MEAN WIND SPEED: 12.1
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

LAPSE RATE: GT 4.0 DEG C/100M
CLASS G

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
NNE	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
NE	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	2	0.1
ENE	0	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	0.1
E	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
ESE	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
SE	0	0.0	1	0.0	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	4	0.2
SSE	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
S	0	0.0	0	0.0	3	0.1	3	0.1	1	0.0	0	0.0	0	0.0	7	0.3
SSW	0	0.0	0	0.0	1	0.0	2	0.1	1	0.0	0	0.0	0	0.0	4	0.2
SW	0	0.0	0	0.0	0	0.0	2	0.1	5	0.2	0	0.0	0	0.0	7	0.3
WSW	0	0.0	0	0.0	4	0.2	3	0.1	9	0.4	2	0.1	0	0.0	18	0.8
W	0	0.0	0	0.0	1	0.0	1	0.0	6	0.3	3	0.1	0	0.0	11	0.5
WNW	0	0.0	0	0.0	0	0.0	1	0.0	4	0.2	0	0.0	0	0.0	5	0.2
NW	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0
NNW	0	0.0	0	0.0	0	0.0	2	0.1	0	0.0	1	0.0	2	0.1	5	0.2
	0	0.0	3	0.1	14	0.6	16	0.7	29	1.3	6	0.3	2	0.1	70	3.2

MEAN WIND SPEED: 12.7
MISSING: 0

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

ALL STABILITY CLASSES

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	5	0.2	10	0.5	40	1.8	65	2.9	36	1.6	8	0.4	164	7.4
NNE	0	0.0	1	0.0	15	0.7	49	2.2	65	2.9	16	0.7	0	0.0	146	6.6
NE	0	0.0	4	0.2	24	1.1	44	2.0	40	1.8	25	1.1	22	1.0	159	7.2
ENE	0	0.0	1	0.0	7	0.3	21	1.0	31	1.4	8	0.4	10	0.5	78	3.5
E	0	0.0	10	0.5	7	0.3	19	0.9	10	0.5	2	0.1	0	0.0	48	2.2
ESE	0	0.0	3	0.1	8	0.4	12	0.5	12	0.5	5	0.2	1	0.0	41	1.9
SE	0	0.0	7	0.3	15	0.7	20	0.9	27	1.2	18	0.8	4	0.2	91	4.1
SSE	0	0.0	3	0.1	20	0.9	36	1.6	24	1.1	9	0.4	2	0.1	94	4.3
S	0	0.0	2	0.1	19	0.9	28	1.3	48	2.2	8	0.4	2	0.1	107	4.9
SSW	0	0.0	1	0.0	16	0.7	33	1.5	44	2.0	10	0.5	1	0.0	105	4.8
SW	0	0.0	4	0.2	13	0.6	38	1.7	59	2.7	13	0.6	2	0.1	129	5.9
WSW	0	0.0	6	0.3	10	0.5	31	1.4	54	2.4	15	0.7	9	0.4	125	5.7
W	0	0.0	8	0.4	15	0.7	51	2.3	102	4.6	45	2.0	8	0.4	229	10.4
WNW	0	0.0	4	0.2	12	0.5	62	2.8	80	3.6	72	3.3	15	0.7	245	11.1
NW	0	0.0	2	0.1	18	0.8	51	2.3	104	4.7	71	3.2	33	1.5	279	12.7
NNW	0	0.0	2	0.1	20	0.9	44	2.0	53	2.4	34	1.5	12	0.5	165	7.5
	0	0.0	63	2.9	229	10.4	579	26.3	818	37.1	387	17.6	129	5.9	2205	100.0

MISSING HOURS: 3

MEAN WIND SPEED: 14.5

ARTIFICIAL ISLAND 10/97-12/97

JOINT DISTRIBUTION OF WIND DIRECTION AND SPEED
BY ATMOSPHERIC STABILITY CLASS
WIND: 300 FT
DELTA T: (300-33FT)

DIRECTION VS SPEED ONLY

WIND SPEED GROUPS (MPH)

DIRECTION	0.0-0.5		0.6-3.5		3.6-7.5		7.6-12.5		12.6-18.5		18.6-24.5		GE 24.6		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
N	0	0.0	5	0.2	10	0.5	40	1.8	65	2.9	36	1.6	8	0.4	164	7.4
NNE	0	0.0	1	0.0	15	0.7	49	2.2	65	2.9	16	0.7	0	0.0	146	6.6
NE	0	0.0	4	0.2	24	1.1	44	2.0	40	1.8	25	1.1	22	1.0	159	7.2
ENE	0	0.0	1	0.0	7	0.3	21	1.0	31	1.4	8	0.4	10	0.5	78	3.5
E	0	0.0	10	0.5	7	0.3	19	0.9	10	0.5	2	0.1	0	0.0	48	2.2
ESE	0	0.0	3	0.1	8	0.4	12	0.5	12	0.5	5	0.2	1	0.0	41	1.9
SE	0	0.0	7	0.3	15	0.7	20	0.9	27	1.2	18	0.8	4	0.2	91	4.1
SSE	0	0.0	3	0.1	20	0.9	36	1.6	24	1.1	9	0.4	2	0.1	94	4.3
S	0	0.0	2	0.1	19	0.9	28	1.3	48	2.2	8	0.4	2	0.1	107	4.8
SSW	0	0.0	1	0.0	16	0.7	33	1.5	44	2.0	10	0.5	1	0.0	105	4.8
SW	0	0.0	4	0.2	13	0.6	38	1.7	59	2.7	13	0.6	2	0.1	129	5.8
WSW	0	0.0	6	0.3	10	0.5	31	1.4	55	2.5	15	0.7	9	0.4	126	5.7
W	0	0.0	8	0.4	15	0.7	51	2.3	102	4.6	45	2.0	8	0.4	229	10.4
WNW	0	0.0	4	0.2	12	0.5	62	2.8	81	3.7	72	3.3	15	0.7	246	11.1
NW	0	0.0	2	0.1	18	0.8	51	2.3	104	4.7	71	3.2	33	1.5	279	12.6
NNW	0	0.0	2	0.1	20	0.9	44	2.0	53	2.4	34	1.5	12	0.5	165	7.5
	0	0.0	63	2.9	229	10.4	579	26.2	820	37.2	387	17.5	129	5.8	2207	100.0

MISSING HOURS: 1

MEAN WIND SPEED: 14.5