

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
 1-July/31-December - 1981
 Supplemental Information

Facility THREE MILE ISLAND, UNIT-1 Licensee DPR - 50/289

1. Regulatory Limits

- a. Fission and activation gases:
 - b. Iodines:
 - c. Particulates, half-lives >8 days:
 - d. Liquid effluents:
- Environmental Technical Specifications
 Article 2.3 (Prior to Amendment 72 see
 letter dated Oct. 20, 1981 L1L-020)

2. Maximum Permissible Concentrations

Provide the MPCs used in determining allowable release rates or concentrations.

- a. Fission and activation gases:
- b. Iodines:
- c. Particulates, half-lives >8 days:
- d. Liquid effluents:

} 10 CFR 20, Appendix B
 Table II

3. Average Energy

Provide the average energy (\bar{E}) of the radionuclide mixture in releases of fission and activation gases, if applicable.
 0.338 \bar{E} (mev)/dis.-average energy

4. Measurements and Approximations of Total Radioactivity

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

- a. Fission and activation gases: BE(LI) spectrometry, Liquid scintillation
- b. Iodines: GE(LI) Spectrometry
- c. Particulates: GE(LI) Spectrometry, GAS flow proportional, B spectrometry
- d. Liquid effluents: GE(LI) spectrometry, liquid scintillation

5. Batch Releases

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

	3rd Quarter	4th Quarter
a. Liquid		
1. Number of batch releases:	20	24
2. Total time period for batch releases:	13748 min.	13522 min.
3. Maximum time period for a batch release:	1135 min.	1820 min.
4. Average time period for batch releases:	687 min.	563 min.
5. Minimum time period for a batch release:	320 min.	145 min.
6. Average stream flow during periods of release of effluent into a flowing stream:	577,600 CFM	1,436,000 CFM
b. Gaseous		
1. Number of batch releases:	17	18
2. Total time period for batch releases:	102828 min.	107,634 min.
3. Maximum time period for a batch release:	44042 min.	30656 min.
4. Average time period for batch releases:	6049 min.	5980 min.
5. Minimum time period for a batch release:	345 min.	530 min.

6. Abnormal Releases

a. Liquid

- 1. Number of releases:
- 2. Total activity released:

None
 -0-

b. Gaseous

- 1. Number of releases:
- 2. Total activity released:

None
 -0-

TABLE 1A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981

GASEOUS EFFLUENTS—SUMMATION OF ALL RELEASES

	Unit	Quarter 3rd	Quarter 4th	Est. Total Error, %
--	------	----------------	----------------	------------------------

A. Fission & activation gases

1. Total release	Ci	3.35 E-2	2.27 E-2	2.50 E 1
2. Average release rate for period	$\mu\text{Ci}/\text{sec}$	4.21 E-3	2.86 E-3	
3. Percent of Technical specification limit	%	7.39 E-5	5.02 E-5	

B. Iodines

1. Total iodine-131	Ci	<1E-12	<1E-12	N.A.
2. Average release rate for period	$\mu\text{Ci}/\text{sec}$	N.A.	N.A.	
3. Percent of technical specification limit	%	N.A.	N.A.	

C. Particulates

1. Particulates with half-lives >8 days	Ci	4.57 E-5	1.33 E-4	2.50 E 1
2. Average release rate for period	$\mu\text{Ci}/\text{sec}$	5.75 E-6	1.67 E-5	
3. Percent of technical specification limit	%	1.15 E-2	3.35 E-2	
4. Gross alpha radioactivity	Ci	<LLD	2.77 E-7	

D. Tritium

1. Total release	Ci	4.89 E-4	4.02 E-4	2.50 E 1
2. Average release rate for period	$\mu\text{Ci}/\text{sec}$	6.15 E-5	5.06 E-5	
3. Percent of technical specification limit	%	1.62 E-6	1.33 E-6	

Note: All less than (<) values are in $\mu\text{Ci}/\text{cc}$.

Tech. Specs. - A.3. - $\leq 1.9\text{E}4 \text{ m}^3/\text{sec}$.
Limits

B.3. - 0.05 $\mu\text{Ci}/\text{sec}$.

C.3. - 0.05 $\mu\text{Ci}/\text{sec}$.

D.3. - $\leq 1.9\text{E}4 \text{ m}^3/\text{sec}$.

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (YEAR)
GASEOUS EFFLUENTS—GROUND-LEVEL RELEASES

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

1. Fission gases

krypton-85	Ci	<1 E-8	<1 E-8	3.35 E-2	2.27 E-2
krypton-85m	Ci			<1 E-8	<1 E-8
krypton-87	Ci				
krypton-88	Ci				
xenon-135	Ci				
xenon-135	Ci				
xenon-135m	Ci				
xenon-138	Ci				
Others (specify)	Ci				
	Ci				
	Ci				
unidentified	Ci				
Total for period	Ci			3.35 E-2	2.27 E-2

2. Iodines

iodine-131	Ci	<1E-12	<1E-12	<1 E-8	<1 E-8
iodine-133	Ci	<1E-10	<1E-10	<1 E-8	<1 E-8
iodine-135	Ci	<1E-10	<1E-10	<1 E-8	<1 E-8
Total for period	Ci	N.A.	N.A.	N.A.	N.A.

3. Particulates

strontium-89	Ci	<1E-11	6.87E-6		
strontium-90	Ci	3.85E-10	1.24E-5		
cesium-134	Ci	<1E-11	<1E-11	<1E-8	<1E-8
cesium-137	Ci	7.00E-6	9.65E-5	3.35E-5	1.69E-5
barium-lanthanum-140	Ci	<1E-11	<1E-11	<1E-8	<1E-8
Others (specify)	Ci				
Gross 2	Ci	<1E-11	2.77E-7		
Cobalt-60	Ci	5.16E-6	<1E-11	<1E-8	<1E-8
unidentified	Ci				

Note: All less than (<) values are in uCi/cc.

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981

LIQUID EFFLUENTS—SUMMATION OF ALL RELEASES

	Unit	Quarter 3rd	Quarter 4th	Est. Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	3.13E-2	2.73E-2	2.73E-2
2. Average diluted concentration during period	$\mu\text{Ci/ml}$	1.90E-9	1.94E-9	
3. Percent of applicable limit	%	1.25E 0	1.09E 0	
B. Tritium				
1. Total release	Ci	2.07E 0	6.50E-1	2.50E 1
2. Average diluted concentration during period	$\mu\text{Ci/ml}$	1.25E-7	4.61E-8	
3. Percent of applicable limit	%	4.20E-3	1.54E-3	
C. Dissolved and entrained gases				
1. Total release	Ci	<1E-4	<1E-4	N.A.
2. Average diluted concentration during period	$\mu\text{Ci/ml}$	N.A.	N.A.	
3. Percent of applicable limit	%	N.A.	N.A.	
D. Gross alpha radioactivity				
1. Total release	Ci	< 1 E-7	<1E-7	N.A.
E. Volume of waste released (prior to dilution)				
	liters	4.70E 5	1.89E 9	1.89E 9
F. Volume of dilution water used during period				
	liters	1.65E 10	1.41E 10	1.00E 1

Note: All less than (<) values are in $\mu\text{Ci/ml}$

Tech. Specs. - A.3. = 2.5 Curies/quarter

Limits

B.3. - 10 CFR 20, Appendix B, Table II.

C.3. = 10 CFR 20, Appendix B, Table II.

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981

LIQUID EFFLUENTS

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
strontium-89	Ci	<5E-8	<5E-8	<5E-8	*<5E-8
strontium-90	Ci	<5E-8	<5E-8	5.60E-6	*1.72E-5
cesium-134	Ci	<5E-7	<5E-7	6.02E-3	2.91E-3
cesium-137	Ci	<5E-7	<5E-7	2.50E-2	2.19E-2
iodine-131	Ci	<1E-6	<1E-6	<1E-6	<1E-6
cobalt-58	Ci	<5E-7	<5E-7	<5E-7	<5E-7
cobalt-60	Ci	<5E-7	<5E-7	1.58E-4	2.12E-3
iron-59	Ci	<5E-7	<5E-7	<5E-7	<5E-7
zinc-65	Ci	<5E-7	<5E-7	<5E-7	<5E-7
manganese-54	Ci	<5E-7	<5E-7	<5E-7	6.39E-5
chromium-51	Ci	<5E-7	<5E-7	<5E-7	<5E-7
zirconium-niobium-95	Ci	<5E-7	<5E-7	<5E-7	<5E-7
molybdenum-99	Ci				
technetium-99m	Ci				
barium-lanthanum-140	Ci				
cerium-141	Ci				
Other (specify)					
Sr-125	Ci	<5E-7	<5E-7	1.59E-4	3.68E-5
P-32	Ci	<1E-6	<1E-6	<1E-6	*<1E-6
Fe-55	Ci	<1E-6	<1E-6	<1E-6	*2.17E-4
undentified	Ci				
Total for period (above)	Ci			3.13E-2	2.73E-2
xenon-133	Ci	<1E-5	<1E-5	<1E-4	<1E-4
xenon-135	Ci	<1E-5	<1E-5	<1E-4	<1E-4

Note: All less than (<) values are in uCi/ml.

* All results of analyses by offsite vendors were not available in time for this report. Results will be supplied as soon as they are available, and this table updated (if applicable) for Sr-89, Sr-90, P-32 and Fe-55 in the 4th quarter 1981.

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981

LIQUID EFFLUENTS

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
strontium-89	Ci	<5E-8	<5E-8	<5E-8	*<5E-8
strontium-90	Ci	<5E-8	<5E-8	5.60E-6	*1.72E-5
cesium-134	Ci	<5E-7	<5E-7	6.02E-3	2.91E-3
cesium-137	Ci	<5E-7	<5E-7	2.50E-2	2.19E-2
iodine-131	Ci	<1E-6	<1E-6	<1E-6	<1E-6
cobalt-58	Ci	<5E-7	<5E-7	<5E-7	<5E-7
cobalt-60	Ci	<5E-7	<5E-7	1.58E-4	2.12E-3
iron-59	Ci	<5E-7	<5E-7	<5E-7	<5E-7
zinc-65	Ci	<5E-7	<5E-7	<5E-7	<5E-7
manganese-54	Ci	<5E-7	<5E-7	<5E-7	6.39E-5
chromium-51	Ci	<5E-7	<5E-7	<5E-7	<5E-7
zirconium-niobium-95	Ci	<5E-7	<5E-7	<5E-7	<5E-7
molybdenum-99	Ci				
technetium-99m	Ci				
barium-lanthanum-140	Ci				
cerium-141	Ci				
Other (specify)					
SB-125	Ci	<5E-7	<5E-7	1.59E-4	3.68E-5
P-32	Ci	<1E-6	<1E-6	<1E-6	*<1E-6
Fe-55	Ci	<1E-6	<1E-6	<1E-6	*2.17E-4
unidentified	Ci				
Total for period (above)	Ci			3.13E-2	2.73E-2
xenon-133	Ci	<1E-5	<1E-5	<1E-4	<1E-4
xenon-135	Ci	<1E-5	<1E-5	<1E-4	<1E-4

Note: All less than (<) values are in uCi/ml.

* All results of analyses by offsite vendors were not available in time for this report. Results will be supplied as soon as they are available, and this table updated (if applicable) for Sr-89, Sr-90, P-32 and Fe-55 in the 4th quarter 1981.

TABLE 3A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

UNIT 1 July-Dec 1981

A. Solid waste shipped off-site for burial or disposal (not irradiated fuel)

1. Type of waste - No Shipments	UNIT	6 month period	EST. TOTAL ERROR %
a. Spent resins, filter sludges, evaporator bottoms, etc.	H ³ C ¹⁴	191.82 192.183	
b. Dry compressible waste, contaminated equipment, etc.	H ³ C ¹⁴	398.58 1.218	
c. Irradiated components, control rods, etc.	H ³ C ¹⁴	N.A.	
d. Other (describe)	H ³ C ¹⁴	N.A.	

2. Estimate of major nuclide composition (by type of waste)		
a. Cs 137	41.2 %	
Ba 137m	30.0 %	
Cs 134	8.5 %	
Co 60	13.5 %	
b. Cs 137	36.3 %	
Ba 137m	34.6 %	
Cs 134	18.2 %	
Co 60	8.4 %	
Ag 110m	1.8 %	
c. N.A.		
d. N.A.		

3. Solid Waste Disposition Number of Shipments	Mode of Transportation	Destination
14	Tractor/Trailer (cask)	Barnwell, S.C.
14	Tractor/Trailer (flatbed)	Richland, Wash
3	Tractor/Trailer (flatbed)	Barnwell, S.C.
5	Tractor/Trailer (van)	Barnwell, S.C.

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination

NOTE: One shipment was a combined Unit1/Unit2 shipment.

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 7 1 1-81 03024
 STABILITY CLASS: A
 ELEVATION, SPEED, SPI88A DIRECTION, DJ188A LAPSE, DT158A
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	11	1	0	0	0	17
NNE	3	3	0	0	0	0	6
NE	1	2	1	0	0	0	4
ENE	1	1	6	1	0	0	9
E	4	1	0	0	0	0	5
ESE	0	4	0	1	0	0	5
SE	2	12	1	2	0	0	17
SSE	2	3	0	0	0	0	5
S	2	4	0	0	0	0	6
SSW	3	8	1	0	0	0	12
SV	3	14	0	1	0	0	27
VSV	4	7	5	0	0	0	16
V	7	14	18	1	0	0	32
VNW	18	15	17	2	0	0	44
NV	14	27	30	21	0	0	186
NW	13	31	22	4	0	0	78
VARIABLE	10	0	0	0	0	0	10
TOTAL	381						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							05

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 81 7 1 1-81 03024
 STABILITY CLASS: B
 ELEVATION, SPEED, SPI88A DIRECTION, DJ188A LAPSE, DT158A
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	3	0	0	0	0	4
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	2	4	0	0	0	0	6
ESE	4	2	0	0	0	0	6
SE	1	2	1	0	0	0	4
SSE	3	2	0	0	0	0	5
S	1	0	0	0	0	0	1
SSW	1	0	0	0	0	0	1
SV	2	1	2	0	0	0	5
VSV	2	2	0	0	0	0	4
V	0	2	3	0	0	0	5
VNW	1	2	1	0	0	0	4
NV	0	1	6	0	1	0	8
NW	0	1	0	0	0	0	1
VARIABLE	3	0	0	0	0	0	3
TOTAL	65						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							05

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
FROM 100 FT: VERSUS AT 150-33 FT.
FOR THE THIRD QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 81 7 1 1-81 03024
STABILITY CLASS. C
ELEVATION: SPEED, SP180A DIRECTION, DI180A LAPSE, DT159A
WIND SPEED(MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION					TOTAL
	1-3	4-7	8-12	13-18	19-24	
N	0	0	0	0	0	0
NNE	0	0	0	0	0	0
NE	0	0	0	0	0	0
ENE	0	1	0	0	0	1
E	0	1	0	0	0	1
ESE	5	2	0	0	0	7
SE	6	1	0	0	0	7
SSE	2	1	0	0	0	3
S	0	1	0	0	0	1
SSW	0	1	2	0	0	3
SW	2	0	0	0	0	2
WSW	5	4	1	0	0	10
W	1	0	1	0	0	2
WNW	0	0	1	1	0	2
NW	0	1	1	0	1	3
NNW	2	0	0	0	0	2
VARIABLE	3	0	0	0	0	3
TOTAL	38	0	0	0	0	38

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 81 7 1 1-81 03024
STABILITY CLASS. D
ELEVATION: SPEED, SP180A DIRECTION, DI180A LAPSE, DT159A
WIND SPEED(MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION					TOTAL
	1-3	4-7	8-12	13-18	19-24	
N	7	0	3	0	0	10
NNE	5	2	0	0	0	7
NE	1	2	0	0	0	3
ENE	0	3	1	0	0	4
E	18	22	5	0	0	45
ESE	33	28	5	1	0	67
SE	17	57	17	1	0	92
SSE	12	41	3	0	0	56
S	13	0	5	0	0	18
SSW	18	16	8	1	0	43
SW	7	7	4	2	0	20
WSW	0	6	0	0	0	6
W	10	7	0	0	0	17
WNW	4	6	0	1	0	11
NW	6	0	0	0	0	6
NNW	8	7	3	1	0	19
VARIABLE	38	0	0	0	0	38
TOTAL	485	0	0	0	0	485

PERIODS OF CALM(HOURS): 00
HOURS OF MISSING DATA: 05

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
FROM 100 FT; VERSUS AT 150-33 FT.
FOR THE THIRD QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 7 1 1-81 03824
STABILITY CLASS. E
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	6	23	2	1	0	0	32
NNE	15	14	0	0	0	0	29
NE	0	10	0	0	0	0	10
ENE	20	11	1	0	0	0	32
E	16	24	0	0	0	0	40
ESE	20	10	1	0	0	0	31
SE	21	14	1	0	0	0	36
SSE	20	28	2	0	0	0	50
S	10	21	3	0	0	0	34
SSW	23	22	4	0	0	0	49
SW	27	27	10	1	0	0	65
VSW	24	23	5	0	0	0	52
V	25	20	6	0	0	0	51
VNW	17	23	18	3	0	0	61
NW	0	17	15	0	0	0	32
NNW	0	21	7	5	0	0	33
VARIABLE	45	0	0	0	0	0	45
TOTAL	782						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							05

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 7 1 1-81 03824
STABILITY CLASS. F
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	10	0	1	0	0	0	11
NNE	5	4	0	0	0	0	9
NE	0	1	0	0	0	0	1
ENE	6	0	0	0	0	0	6
E	10	4	0	0	0	0	14
ESE	12	7	0	0	0	0	19
SE	15	0	0	0	0	0	15
SSE	21	1	0	0	0	0	22
S	33	1	0	0	0	0	34
SSW	10	3	0	0	0	0	13
SW	27	0	0	0	0	0	27
VSW	17	0	1	0	0	0	18
V	20	22	1	0	0	0	43
VNW	16	16	1	0	0	0	33
NW	5	0	4	0	0	0	9
NNW	4	16	2	0	0	0	22
VARIABLE	20	0	0	0	0	0	20
TOTAL	354						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							05

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
 FROM 100 FT: VERSUS AT 150-33 FT.
 FOR THE THIRD QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION *

PERIOD OF RECORD= 81 7 1 1-81 03024
 STABILITY CLASS, C
 ELEVATION, SPEED, SPI08A DIRECTION, DI188A LAPSE, DT158A
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	0	0	0	0	0	2
NNE	0	1	0	0	0	0	1
NE	2	0	0	0	0	0	2
ENE	4	0	0	0	0	0	4
E	3	1	0	0	0	0	4
ESE	5	0	0	0	0	0	5
SE	7	2	0	0	0	0	9
SSE	8	0	0	0	0	0	8
S	0	0	0	0	0	0	0
SSW	6	1	0	0	0	0	7
SV	3	0	0	0	0	0	3
VSW	10	0	0	0	0	0	10
V	5	2	0	0	0	0	7
VNW	4	0	0	0	0	0	4
NV	3	2	1	0	0	0	6
NNW	2	0	1	0	0	0	3
VARIABLE	7	0	0	0	0	0	7
TOTAL	88						
PERIODS OF CALM(HOURS),	00						
HOURS OF MISSING DATA,	00						

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 7 1 1-81 03024
 STABILITY CLASS, ALL
 ELEVATION, SPEED, SPI08A DIRECTION, DI188A LAPSE, DT158A
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	31	01	7	1	0	0	40
NNE	20	24	0	0	0	0	44
NE	28	15	1	0	0	0	44
ENE	40	16	0	1	0	0	57
E	53	07	5	0	0	0	65
ESE	88	62	6	2	0	0	158
SE	63	06	20	3	0	0	182
SSE	73	76	5	0	0	0	154
S	76	36	8	0	0	0	120
SSW	62	60	15	1	0	0	138
SV	71	40	25	4	0	0	140
VSW	67	01	12	0	0	0	80
V	77	67	20	1	0	0	165
VNW	02	67	47	7	0	0	123
NV	36	68	71	37	7	0	217
NNW	38	76	35	10	0	0	159
VARIABLE	145	0	0	0	0	0	145
TOTAL	2113						
PERIODS OF CALM(HOURS),	00						
HOURS OF MISSING DATA,	00						

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
 100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS, A

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

 WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	5	1	0	0	0	8
NNE	2	2	0	0	0	0	4
NE	1	2	1	0	0	0	4
ENE	0	1	6	1	0	0	8
E	2	1	0	0	0	0	3
ESE	0	3	0	0	0	0	3
SE	1	11	1	0	0	0	13
SSE	2	2	0	0	0	0	4
S	2	5	0	0	0	0	7
SSW	3	8	1	0	0	0	12
SW	3	10	11	1	0	0	25
WSW	5	5	7	0	0	0	17
W	5	0	0	2	0	0	25
WNW	4	13	13	2	0	0	32
NW	7	17	27	18	3	0	72
NNW	6	21	0	3	0	0	30
VARIABLE	15	0	0	0	0	0	30

 TOTAL 276
 PERIODS OF CALM (HOURS), 0
 HOURS OF MISSING DATA, 65

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS ΔT 150-33 FT. FOR UNIT -1 SPECIFIC RELEASE DATES
DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0 0 0 0- 0 0 0 0

STABILITY CLASS, B

ELEVATION, SPEED, SPI08A DIRECTION, DJ108A LAPSE, DT150A

WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-16	19-24	>24	TOTAL
N	1	2	0	0	0	0	3
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	1	0	0	0	0	0	1
E	1	1	0	0	0	0	2
ESE	4	2	0	0	0	0	6
SE	0	1	1	0	0	0	2
SSE	3	3	0	0	0	0	6
S	1	0	0	0	0	0	1
SSW	1	0	0	0	0	0	1
SW	2	1	3	0	0	0	6
WSW	2	2	0	0	0	0	4
W	0	1	3	0	0	0	4
WNW	0	1	3	0	0	0	4
NW	0	0	7	0	1	0	8
NNW	0	1	0	0	0	0	1
VARIABLE	2	0	0	0	0	0	6

TOTAL PERIODS OF CALM (HOURS), 0
HOURS OF MISSING DATA, 65

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS ΔT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 0200-0200

STABILITY CLASS: C

ELEVATION: SPEED, SP180A DIRECTION, DJ180A LAPSE, DT150A

WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	2	1	0	0	0	0	1
E	0	1	0	0	0	0	1
ESE	4	0	0	0	0	0	4
SE	0	0	0	0	0	0	0
SSE	2	1	0	0	0	0	3
S	0	1	0	0	0	0	1
SSW	0	1	1	0	0	0	2
SV	1	0	0	0	0	0	1
WSW	4	4	1	0	0	0	9
V	1	0	0	0	0	0	1
WNW	0	0	0	1	0	0	1
NW	0	0	1	0	1	0	2
NNW	2	0	0	0	0	0	2
VARIABLE	3	0	0	0	0	0	6

TOTAL PERIODS OF CALM (HOURS): 0
HOURS OF MISSING DATA: 65

JOINT FREQUENCY TABLE OF WND SPEED AND DIRECTION FROM
 100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: D

ELEVATION, SPEED, SPI00A DIRECTION, DJ100A LAPSE, DT150A

 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	6	3	0	0	0	0	9
NNE	4	1	0	0	0	0	5
NE	1	2	0	0	0	0	3
ENE	6	3	1	0	0	0	10
E	12	18	2	0	0	0	32
ESE	30	20	2	0	0	0	52
SE	10	64	12	0	0	0	86
SSE	6	27	2	0	0	0	35
S	4	6	3	0	0	0	13
SSW	6	7	6	0	0	0	19
SV	3	4	4	2	0	0	13
VSW	4	4	0	0	0	0	8
V	6	3	5	0	0	0	14
VNW	3	5	6	1	0	0	15
NV	6	5	6	0	0	0	25
NNW	7	4	2	0	0	0	13
VARIABLE	35	0	0	0	0	0	175

 TOTAL 352
 PERIODS OF CALM(HOURS), 0
 HOURS OF MISSING DATA, 65

JOINT FREQUENCY TABLE OF WND SPEED AND DIRECTION FROM
 100 FT. VERSUS ΔT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

ATTACHMENT 2
 PAGE 5 OF 8

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS. E

ELEVATION, SPEED, SPI00A DIRECTION, DI100A LAPSE, DT150A

WIND DIRECTION	WIND SPEED (MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	4	17	1	1	0	0	23
NNE	8	7	0	0	0	0	15
NE	5	4	0	0	0	0	9
ENE	16	5	0	0	0	0	21
E	6	21	0	0	0	0	27
ESE	21	15	0	0	0	0	36
SE	14	11	0	0	0	0	25
SSE	10	11	0	0	0	0	21
S	14	12	2	0	0	0	28
SSW	11	14	3	0	0	0	28
SW	10	23	12	1	0	0	55
WSW	17	17	0	0	0	0	42
W	16	14	3	0	0	0	33
WNW	12	24	17	3	0	0	56
NW	4	14	13	8	0	0	39
NNW	8	14	7	3	0	0	32
VARIABLE	36	0	0	0	0	0	72

TOTAL 400
 PERIODS OF CALM (HOURS), 0
 HOURS OF MISSING DATA, 65

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
 100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 0000-0000

STABILITY CLASS: F

ELEVATION: SPEED:SP100A DIRECTION:DI100A LAPSE:DT150A

 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	7	4	0	0	0	0	11
NNE	1	3	0	0	0	0	4
NE	4	0	0	0	0	0	4
ENE	4	0	0	0	0	0	4
E	8	4	0	0	0	0	12
ESE	6	7	0	0	0	0	13
SE	9	7	0	0	0	0	16
SSE	21	1	0	0	0	0	22
S	26	0	0	0	0	0	26
SSW	13	2	0	0	0	0	15
SW	20	0	0	0	0	0	20
VSW	7	4	1	0	0	0	12
V	24	18	1	0	0	0	43
VNW	8	11	0	0	0	0	19
NW	1	7	3	0	0	0	11
NNW	2	5	3	0	0	0	10
VARIABLE	21	0	0	0	0	0	63

 TOTAL 242
 PERIODS OF CALM(HOURS) 0
 HOURS OF MISSING DATA: 65

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
 100 FT. VERSUS ΔT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 0000-0000

STABILITY CLASS: C

ELEVATION: SPEED: SPI00A DIRECTION: DI100A LAPSE: DT150A

 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	2	0	0	0	0	0	2
ENE	2	0	0	0	0	0	2
E	3	0	0	0	0	0	3
ESE	4	0	0	0	0	0	4
SE	7	2	0	0	0	0	9
SSE	6	0	0	0	0	0	6
S	10	0	0	0	0	0	10
SSW	0	0	0	0	0	0	0
SW	1	0	0	0	0	0	1
WSW	12	0	0	0	0	0	12
W	2	0	0	0	0	0	2
VNW	1	7	0	0	0	0	8
NW	2	1	1	0	0	0	4
NNW	0	0	1	0	0	0	1
VARIABLE	6	0	0	0	0	0	12

 TOTAL 73
 PERIODS OF CALM(HOURS), 0
 HOURS OF MISSING DATA, 65

JOINT FREQUENCY TABLE OF WND SPEED AND DIRECTION FROM
 100 FT. VERSUS ΔT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
 DURING THE THIRD QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000

STABILITY CLASS: ALL

ELEVATION: SPEED.SPI00A DIRECTION:DI100A LAPSE:DT150A

WIND DIRECTION	WIND SPEED(MPH)						TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	
N	21	31	2	1	0	0	55
NNE	16	13	0	0	0	0	29
NE	13	8	1	0	0	0	22
ENE	20	10	7	1	0	0	47
E	32	46	2	0	0	0	80
ESE	60	47	2	0	0	0	118
SE	41	96	14	0	0	0	151
SSE	50	45	2	0	0	0	97
S	57	24	5	0	0	0	86
SSW	42	41	11	0	0	0	94
SW	40	38	30	4	0	0	121
WSW	51	36	17	0	0	0	104
W	54	45	21	2	0	0	122
WNW	28	61	30	7	0	0	135
NW	20	44	25	34	5	0	161
NNW	25	45	22	6	0	0	98
VARIABLE	118	0	0	0	0	0	354

TOTAL 1520
 PERIODS OF CALM(HOURS), 0
 HOURS OF MISSING DATA, 65

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 8118 1 1-81123124
 STABILITY CLASS: A
 ELEVATION, SPEED, SPIRBA DIRECTION, DI18BA LAPSE, DT18BA
 WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	4	7	0	0	0	12
NNE	0	1	1	0	0	0	2
NE	2	0	1	0	0	0	3
ENE	1	1	0	0	0	0	2
E	0	4	0	0	0	0	4
ESE	1	2	2	0	0	0	5
SE	1	1	0	0	0	0	2
SSE	0	4	0	0	0	0	4
S	2	1	1	0	0	0	4
SSW	2	6	2	0	0	0	10
...	3	8	4	0	0	0	15
WSW	1	2	0	0	0	0	3
W	2	4	3	1	3	0	13
WNW	2	3	4	3	1	0	13
NW	2	14	15	11	4	0	45
NNW	7	15	13	0	1	0	45
VARIABLE	12	0	0	0	0	0	12
TOTAL	183						
PERIODS OF CALM (HOURS):							8
HOURS OF MISSING DATA:							82

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 8118 1 1-81123124
 STABILITY CLASS: B
 ELEVATION, SPEED, SPIRBA DIRECTION, DI18BA LAPSE, DT18BA
 WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	1	1	0	0	0	4
NNE	0	0	0	0	0	0	0
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	1	0	0	0	0	0	1
ESE	0	1	1	0	0	0	2
SE	2	2	1	0	0	0	5
SSE	2	1	0	0	0	0	3
S	3	0	1	0	0	0	4
SSW	0	4	0	0	0	0	4
...	0	1	2	0	0	0	3
WSW	0	0	0	0	0	0	0
W	0	0	3	0	1	0	4
WNW	2	2	1	1	2	1	9
NW	0	2	1	4	3	1	11
NNW	0	0	2	1	0	0	3
VARIABLE	6	0	0	0	0	0	6
TOTAL	54						
PERIODS OF CALM (HOURS):							0
HOURS OF MISSING DATA:							82

ENTER C TO CONTINUE
 C

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
FROM 100 FT: VERSUS ΔT 150-33 FT.
FOR THE FOURTH QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 8118 1 1-81128124
STABILITY CLASS, C
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	1	0	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	4	0	0	0	0	4
E	1	2	0	0	0	0	3
ESE	2	1	1	0	0	0	4
SE	0	0	2	0	0	0	2
SSE	0	2	0	0	0	0	2
S	1	0	1	0	0	0	2
SSW	0	1	1	0	0	0	2
SV	0	2	0	0	0	0	2
VSV	0	1	0	0	0	0	1
V	0	0	2	2	0	0	4
VNW	1	0	2	2	0	0	5
NV	2	1	0	4	0	0	7
MNV	0	2	0	2	0	0	4
VARIABLE	2	0	0	0	0	0	2
TOTAL	52						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							62

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 8118 1 1-81128124
STABILITY CLASS, D
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	17	3	0	0	0	20
NNE	0	7	2	0	0	0	17
NE	7	0	0	0	0	0	16
ENE	11	10	1	0	0	0	30
E	0	16	1	0	0	0	26
ESE	7	44	6	0	0	0	57
SE	5	30	0	0	0	0	44
SSE	0	0	4	0	0	0	22
S	0	13	3	0	0	0	25
SSW	0	7	1	0	0	0	17
SV	3	4	0	1	0	0	8
VSV	7	3	3	2	0	0	15
V	0	7	42	23	2	0	70
VNW	7	10	40	76	12	0	154
NV	3	25	61	71	40	0	214
MNV	14	0	11	10	2	0	55
VARIABLE	47	0	0	0	0	0	47
TOTAL	808						
PERIODS OF CALM(HOURS)							0
HOURS OF MISSING DATA							62

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
FROM 100 FT: VERSUS AT 150-33 FT.
FOR THE FOURTH QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 8118 1 1-81123124
STABILITY CLASS. E
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	10	31	5	3	0	0	54
NNE	12	18	3	0	0	0	25
NE	18	4	0	0	0	0	14
ENE	17	5	0	0	0	0	22
E	15	18	0	0	0	0	33
ESE	23	16	2	0	0	0	41
SE	14	15	2	0	0	0	31
SSE	11	15	6	0	0	0	32
S	6	12	4	0	0	0	22
SSW	13	0	4	0	0	0	28
SW	0	22	1	1	0	0	33
VSW	18	28	3	0	0	0	33
V	18	35	21	3	0	0	69
VNW	18	17	37	25	1	0	98
NW	4	28	43	0	2	0	86
NVW	8	27	19	14	0	0	68
VARIABLE	51	8	8	2	0	0	51
TOTAL	670						
PERIODS OF CALM(HOURS),							0
HOURS OF MISSING DATA,							62

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 8118 1 1-81123124
STABILITY CLASS. F
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED (MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	18	0	0	0	0	0	27
NNE	0	0	0	0	0	0	0
NE	6	0	0	0	0	0	6
ENE	8	0	0	0	0	0	8
E	7	5	0	0	0	0	13
ESE	17	3	0	0	0	0	20
SE	15	4	0	0	0	0	19
SSE	18	3	0	0	0	0	13
S	19	2	0	0	0	0	21
SSW	19	0	1	0	0	0	20
SW	18	2	0	0	0	0	12
VSW	7	3	0	0	0	0	10
V	15	7	5	0	0	0	27
VNW	6	7	1	0	0	0	14
NW	2	6	1	2	0	0	11
NVW	14	5	8	1	0	0	28
VARIABLE	56	0	8	0	0	0	56
TOTAL	258						
PERIODS OF CALM(HOURS),							0
HOURS OF MISSING DATA,							62

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION
FROM 100 FT: VERSUS AT 150-33 FT.
FOR THE FOURTH QUARTER 1981

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 8118 1 1-81123124
STABILITY CLASS, C
ELEVATION, SPEED, SPI88A DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION:	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	2	0	0	0	0	4
NNE	3	1	0	0	0	0	4
NE	2	0	0	0	0	0	2
ENE	2	0	0	0	0	0	2
E	0	2	0	0	0	0	2
ESE	4	2	0	0	0	0	6
SE	18	1	0	0	0	0	19
SSE	18	0	0	0	0	0	18
S	15	0	0	0	0	0	15
SSW	18	0	0	0	0	0	18
SW	4	1	0	0	0	0	5
WSW	2	2	0	0	0	0	4
W	4	1	2	0	0	0	7
WNW	8	0	1	0	0	0	9
NW	3	3	1	2	0	0	9
NNW	2	3	2	0	0	0	7
VARIABLE	15	0	0	0	0	0	15
TOTAL	112	18	12	10	16	3	161
PERIODS OF CALM(HOURS):	0	0	0	0	0	0	0
HOURS OF MISSING DATA,	62	0	0	0	0	0	62

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 8118 1 1-81123124
STABILITY CLASS, ALL
ELEVATION, SPEED, SPI88A DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION:	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	48	05	16	3	0	0	72
NNE	32	10	6	0	0	0	48
NE	28	13	1	0	0	0	42
ENE	30	28	1	0	0	0	59
E	38	48	1	0	0	0	87
ESE	54	60	12	0	0	0	126
SE	47	53	14	0	0	0	114
SSE	58	34	18	0	0	0	110
S	55	28	10	0	0	0	93
SSW	63	27	0	0	0	0	90
SW	20	48	7	2	0	0	77
WSW	27	31	6	2	0	0	66
W	36	04	78	20	6	0	144
WNW	28	30	05	107	16	1	287
NW	16	70	122	183	64	8	563
NNW	45	81	55	46	3	0	230
VARIABLE	180	0	0	0	0	0	180
TOTAL	2146	312	214	126	26	0	2814
PERIODS OF CALM(HOURS):	0	0	0	0	0	0	0
HOURS OF MISSING DATA,	62	0	0	0	0	0	62

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS ΔT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
DURING THE FOURTH QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 0000-0000
STABILITY CLASS. A
ELEVATION, SPEED, SPIBBA DIRECTION, DI1B8A LAPSE, DT158A
WIND SPEED(MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION					TOTAL
	1-3	4-7	8-12	13-18	19-24	
N	1	3	1	0	0	5
NNE	0	1	1	0	0	2
NE	1	0	0	0	0	1
ENE	1	1	0	0	0	2
E	0	4	0	0	0	4
ESE	1	2	1	0	0	4
SE	1	1	0	0	0	2
SSE	0	4	0	0	0	4
S	2	1	1	0	0	4
SSW	2	6	2	0	0	10
SW	3	0	4	0	0	7
VSW	1	2	0	0	0	3
V	2	4	2	1	3	12
VNW	3	2	3	2	0	10
NV	2	12	10	0	3	35
NNV	0	10	0	10	1	21
VARIABLE	12	0	0	0	0	12
TOTAL	156					
PERIODS OF CALM(HOURS)	0					
HOURS OF MISSING DATA	06					

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 0000-0000
STABILITY CLASS. B
ELEVATION, SPEED, SPIBBA DIRECTION, DI1B8A LAPSE, DT158A
WIND SPEED(MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION					TOTAL
	1-3	4-7	8-12	13-18	19-24	
N	2	1	1	0	0	4
NNE	0	0	0	0	0	0
NE	1	0	0	0	0	1
ENE	0	0	0	0	0	0
E	1	0	0	0	0	1
ESE	0	1	1	0	0	2
SE	2	2	0	0	0	4
SSE	2	1	0	0	0	3
S	3	0	1	0	0	4
SSW	0	4	0	0	0	4
SW	0	1	2	0	0	3
VSW	0	0	0	0	0	0
V	0	0	3	0	1	4
VNW	2	2	1	1	0	6
NV	0	1	1	3	1	7
NNV	0	0	3	1	0	4
VARIABLE	6	0	0	0	0	6
TOTAL	47					
PERIODS OF CALM(HOURS)	0					
HOURS OF MISSING DATA	06					

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
DURING THE FOURTH QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000
STABILITY CLASS. C
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	0	0	0	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	4	0	0	0	0	4
E	1	2	0	0	0	0	3
ESE	2	1	1	0	0	0	4
SE	0	0	0	0	0	0	0
SSE	0	2	0	0	0	0	2
S	1	0	1	0	0	0	2
SSW	0	1	1	0	0	0	2
SW	0	2	0	0	0	0	2
VSW	0	1	0	0	0	0	1
V	0	0	2	2	0	0	4
VNW	1	0	1	2	0	0	4
NW	2	1	0	3	4	0	10
NNW	0	1	0	2	0	0	3
VARIABLE	2	0	0	0	0	0	2
TOTAL	42	0	0	0	0	0	42
PERIODS OF CALM(HOURS)	0	0	0	0	0	0	0
HOURS OF MISSING DATA	06	06	06	06	06	06	06

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 0000-0000
STABILITY CLASS. D
ELEVATION, SPEED, SPIRBA DIRECTION, DI188A LAPSE, DT188A
WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	7	14	3	0	0	0	24
NNE	4	3	0	0	0	0	7
NE	7	0	0	0	0	0	15
ENE	0	17	0	0	0	0	26
E	0	14	1	0	0	0	24
ESE	7	40	5	0	0	0	62
SE	0	24	7	0	0	0	36
SSE	10	0	4	0	0	0	22
S	0	13	3	0	0	0	25
SSW	0	6	1	0	0	0	15
SW	2	3	0	1	0	0	6
VSW	7	3	3	2	0	0	15
V	5	6	40	20	2	0	73
VNW	6	0	44	73	4	0	136
NW	4	27	50	08	37	2	178
NNW	12	0	11	14	2	0	47
VARIABLE	42	0	0	0	0	0	42
TOTAL	781	0	0	0	0	0	781
PERIODS OF CALM(HOURS)	0	0	0	0	0	0	0
HOURS OF MISSING DATA	06	06	06	06	06	06	06

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
DURING THE FOURTH QUARTER OF 1981

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 0000-0000
STABILITY CLASS. E
ELEVATION, SPEED, SP180A DIRECTION, DT180A LAPSE, DT180A
WIND SPEED (MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION							TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	TOTAL	
N	15	20	4	1	0	0	40	0
NNE	11	7	2	0	0	0	20	0
NE	0	2	0	0	0	0	11	0
ENE	16	2	0	0	0	0	18	0
E	12	13	0	0	0	0	27	0
ESE	23	16	2	0	0	0	41	0
SE	13	15	2	0	0	0	30	0
SSE	0	15	6	0	0	0	30	0
S	7	12	4	0	0	0	23	0
SSW	14	10	4	0	0	0	28	0
SV	0	18	1	1	0	0	20	0
VSW	8	18	3	0	0	0	29	0
V	0	30	21	4	0	0	64	0
VNW	0	13	20	14	1	0	66	0
NV	4	27	30	7	2	0	70	0
NNW	7	24	10	7	0	0	57	0
VARIABLE	45	0	0	0	0	0	45	0
TOTAL	601	0	0	0	0	0	601	0
PERIODS OF CALM(HOURS)	0	0	0	0	0	0	0	0
HOURS OF MISSING DATA	08	08	08	08	08	08	08	08

HOURS AT EACH WIND SPEED AND DIRECTION
PERIOD OF RECORD= 0000-0000
STABILITY CLASS. F
ELEVATION, SPEED, SP180A DIRECTION, DT180A LAPSE, DT180A
WIND SPEED (MPH)

WIND DIRECTION	HOURS AT EACH WIND SPEED AND DIRECTION							TOTAL
	1-3	4-7	8-12	13-18	19-24	>24	TOTAL	
N	18	0	0	0	0	0	26	
NNE	10	0	0	0	0	0	10	
NE	5	0	0	0	0	0	5	
ENE	0	0	0	0	0	0	0	
E	7	6	0	0	0	0	13	
ESE	15	4	0	0	0	0	19	
SE	16	4	0	0	0	0	20	
SSE	11	4	0	0	0	0	15	
S	18	2	0	0	0	0	20	
SSW	10	0	1	0	0	0	11	
SV	11	2	0	0	0	0	13	
VSW	6	2	0	0	0	0	8	
V	15	7	5	0	0	0	27	
VNW	6	6	1	0	0	0	13	
NV	2	5	1	2	0	0	10	
NNW	13	5	0	1	0	0	19	
VARIABLE	56	0	0	0	0	0	56	
TOTAL	255	0	0	0	0	0	255	
PERIODS OF CALM(HOURS)	0	0	0	0	0	0	0	
HOURS OF MISSING DATA	06	06	06	06	06	06	06	

ENTER C TO CONTINUE

JOINT FREQUENCY TABLE OF WIND SPEED AND DIRECTION FROM
100 FT. VERSUS AT 150-33 FT. FOR UNIT-1 SPECIFIC RELEASE DATES
DURING THE FOURTH QUARTER OF 1981

		HOURS AT EACH WIND SPEED AND DIRECTION						HOURS AT EACH WIND SPEED AND DIRECTION											
		PERIOD OF RECORD: 0000-0000						PERIOD OF RECORD: 0000-0000											
		STABILITY CLASS: C						STABILITY CLASS: ALL											
		ELEVATION, SPEED, SPIRBA DIRECTION, DI18BA LAPSE, DT18BA						ELEVATION, SPEED, SPIRBA DIRECTION, DI18BA LAPSE, DT18BA											
		WIND SPEED(MPH)						WIND SPEED(MPH)											
		>24 TOTAL						>24 TOTAL											
WIND DIRECTION	VARIABLE	1-3	4-7	8-12	13-18	19-24	1-3	4-7	8-12	13-18	19-24	1-3	4-7	8-12	13-18	19-24	>24 TOTAL		
N		3	2	0	0	0	47	07	0	1	0	0	0	0	0	114			
NNE		3	0	0	0	0	28	11	3	0	0	0	0	0	0	42			
NE		2	0	0	0	0	25	18	0	0	0	0	0	0	0	30			
ENE		2	0	0	0	0	37	24	0	0	0	0	0	0	0	61			
E		0	3	0	0	0	38	42	1	0	0	0	0	0	0	81			
ESE		0	2	0	0	0	03	66	18	0	0	0	0	0	0	120			
SE		10	1	0	0	0	47	47	0	0	0	0	0	0	0	183			
SSE		10	0	0	0	0	01	34	18	0	0	0	0	0	0	05			
S		17	0	0	0	0	07	28	10	0	0	0	0	0	0	05			
SSW		11	0	0	0	0	04	27	0	0	0	0	0	0	0	00			
SW		4	1	0	0	0	20	35	7	2	0	0	0	0	0	73			
WSW		2	2	0	0	0	24	28	8	2	0	0	0	0	0	68			
W		5	1	2	0	0	36	48	75	27	6	0	0	0	0	102			
WNW		0	0	1	0	0	27	32	80	02	5	0	0	0	0	238			
NW		4	3	1	2	0	18	76	182	83	47	3	329						
NNW		0	3	2	0	0	48	06	02	30	3	0	0	0	0	186			
VARIABLE		15	0	0	0	0	178	0	0	0	0	0	0	0	0	178			
TOTAL	119																		
PERIODS OF CALM(HOURS)	0																		
HOURS OF MISSING DATA	06																		

ENTER C TO CONTINUE