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2.1 SUMMARY

Data are presented in this section which provide a basis for the selection of design criteria for hurricane, tornado, flood and earthquake protection, and to state the adequacy of concepts for controlling routine and accidental release of radioactive liquids and gases to the environment. Field programs to investigate geology, seismology, hydrology, have been completed. A meteorological field program was in effect until mid 1970. A modified program will continue throughout the nuclear unit operation. Additional information on site characteristics and meteorology is provided in licensing correspondence concerning Turkey Point Units 3 & 4 compliance with 10 CFR Part 50 Appendix I. [(1)] [(2)]

The site is on the shore of Biscayne Bay, about 25 miles south of Miami, Florida. The area immediately surrounding the site is low and swampy, very sparsely populated and unsuited for construction without raising the elevation with fill. The nearest farming area lies in the northwest quarter of a five mile arc from the site.

The immediate area surrounding the nuclear units is flat and rises very gently from sea level at the shoreline of Biscayne Bay to an elevation of about 10 ft. above Mean Sea Level (MSL) at a point some 8 to 10 miles west of the site. To the east, 5 to 8 miles across Biscayne Bay, is a series of offshore islands running in a northeast-southwest direction between the Bay and the Atlantic Ocean, the largest of which is Elliott Key. These islands are undeveloped with the exception of a few part time residents scattered throughout the Keys. A Dade County public park is located eight tenths of a mile north of the northern containment (Unit 3) and is occupied on a day time transient basis.

(1) Letter L-76-212, "Appendix I Evaluation", dated June 4, 1976 from R.E. Uhrig of Florida Power and Light to D. R. Muller of the USNRC.
(2) Letter L-76-358, "Appendix I Additional Information", dated October 14, 1976 from R. E. Uhrig of Florida Power and Light to G. Lear of USNRC Branch No. 3.

Air movement at the site prevails almost 100 per cent of the time. Prevailing winds are out of the southeast. The atmosphere in the area is generally unstable with diurnal inversions occurring fairly frequently. Inversions are almost invariably accompanied by continually shifting wind directions most of which are from the off-shore quadrants.

The Miami area has experienced winds of hurricane force periodically, and the plant may be subjected to flood tides of varying heights. External flood protection is described in Appendix 5G.

Circulating water and intake cooling water discharged from Units 1, 2, 3 and 4 flows to a closed cooling system as described in Section 2.3.3 of the Environmental Report Supplement submitted to the AEC on November 8, 1971, with interim flow to Biscayne Bay and Card Sound, in accordance with the Final Judgement, Civil Action No. 70-328-CA in the United States District Court for the Southern District of Florida of September 10, 1971 (Appendix 6 in the Environmental Report Supplement).

The normal direction of natural drainage of surface and ground water in the area of the site is to the east and south toward Biscayne Bay and will not affect off-site wells. The Pre-Operational Surveillance Plan, which is a radiological background study of the Turkey Point area, was initiated prior to initial startup of Unit 3. Samples of air, soil, water, marine life, vegetation, etc. in the area were collected and studied.

The site has underlying limestone bedrock on which has been placed compacted limestone rock fill to elevation + 18 MLW. The major structures have been founded on this fill. The bedrock beneath is competent with respect to foundation conditions for the nuclear units. The area is in a seismologically quiet region, as all of Florida is classified Zone 0 (the zone of least probability of damage) by the Uniform Building Code, published by International Conference of Building Officials. Despite the lack of any substantiating earthquake history, the units have been designed for an earthquake of .05g and all safety features have been checked to determine that no loss of function will occur in case of an earthquake of .15g horizontal ground acceleration.

The following specialists in environmental sciences have participated in developing site information:

First Research Corporation of Miami, Fla.	Population and Land Use (Sections 2.4 and 2.5)
Professor Homer W. Hiser Mr. Harold P. Gerrish Professor Harry V. Senn All from Radar Meteorological Laboratory, University of Miami, Institute of Marine Science	Climatology Section 2.6
Mr. Richard O. Eaton, P.E., Hydraulic Engineer Mr. Theodore E. Haeussner, Hydraulic Engineer U. S. Corps of Engineers Mr. J. W. Johnson, University of California	Hurricane Flooding and Wave Run Up Section 2.6 and Appendix 2B
Mr. Lester A. Cohen Mr. John A. Frizzola Meteorologists, Brookhaven National Laboratory	Meteorology, On Site and Diffusion Section 2.6 and Appendix 2A
Dames & Moore, Atlanta, Georgia Professor John A. Stevens, Associate Professor Civil Engineering, University of Miami	Hydrology, Geology, Seismology and Foundations Sections 2.7, 2.9, 2.10, 2.11
Dr. William S. Richardson, Associate Professor of Oceanography, University of Miami Institute of Marine Science Dr. Donald W. Pritchard and Dr. James Carpenter, both of Johns Hopkins University, Chesapeake Bay Institute Dr. Robert Dean University of Florida Marine Acoustical Services, Oceanographers of Miami	Hydrology, Biscayne Bay and Oceanography Sections 2.7, 2.8 and Appendix 2C
Dr. George W. Housner, Consultant California Institute of Technology	Earthquakes Section 2.11

Dr. James B. Lackey, Professor Emeritus, University of Florida	Ecology: Plankton
Dr. Charles B. Wurtz, LaSalle College	Invertebrates
Dr. Joseph Davis, University of Florida	Marine botany
Dr. Edwin S. Iverson	Vegetation (bay)
Dr. C. P. Idyll	Fish & food chain
Dr. Durbin Tabb	
Dr. E. J. Ferguson Wood	
Mr. Richard Nugent	
All of the University of Miami, Institute of Marine Science	
Dr. Roger Yorton, University of Florida	Chemistry, Bay Water
Bechtel Associates, Gaithersburg, Md.	General
Bechtel Corporation, Various U.S. offices	
Southern Nuclear Engineering, Inc. Dunedin, Florida; Washington, D.C.	
Westinghouse Electric Corporation Atomic Power Division, Pittsburgh, Pa.	
Ebasco Services Incorporated, New York, NY	Subsurface Conditions Section 2.9.4

2.1.1 DESIGN CRITERIA

Performance Standards

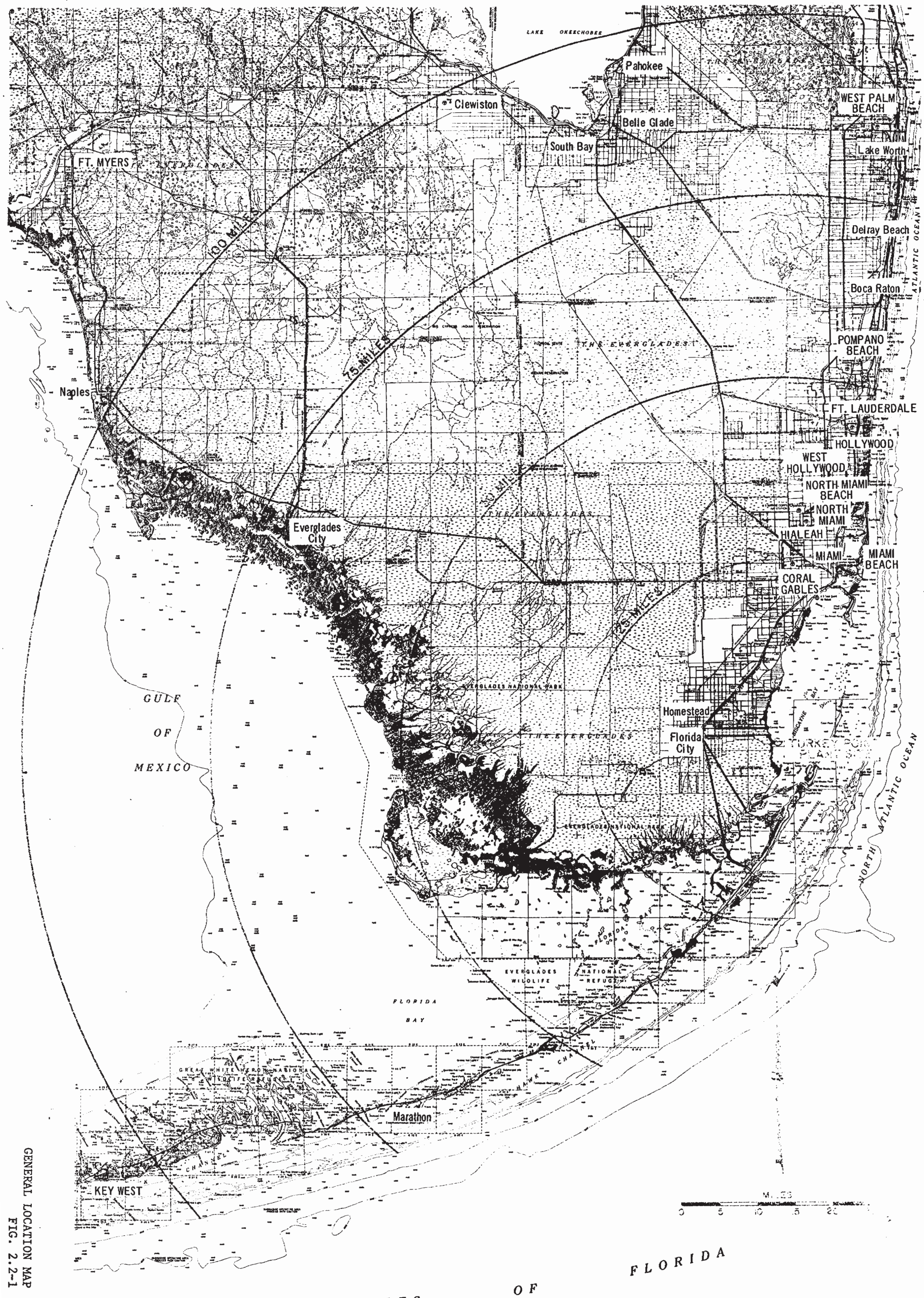
Criterion: Those systems and components of reactor facilities which are essential to the prevention or to the mitigation of the consequences of nuclear accidents which could cause undue risk to the health and safety of the public shall be designed, fabricated, and erected to performance standards that will enable such systems and components to withstand, without undue risk to the health and safety of the public the forces that might reasonably, be imposed by the occurrence of an extraordinary natural phenomenon such as earthquake, tornado, flooding condition, high wind or heavy ice. The design bases so established shall reflect: (a) appropriate consideration of the most severe of these natural phenomena that have been officially recorded for the site and the surrounding area and (b) an appropriate margin for withstanding forces greater than those recorded to reflect uncertainties about the historical data and their suitability as a basis for design. (GDC 2)

The forces that might be imposed by postulated extraordinary natural phenomenon such as earthquakes, storms and flooding have been analyzed and used in the design as discussed in detail in Section 5.

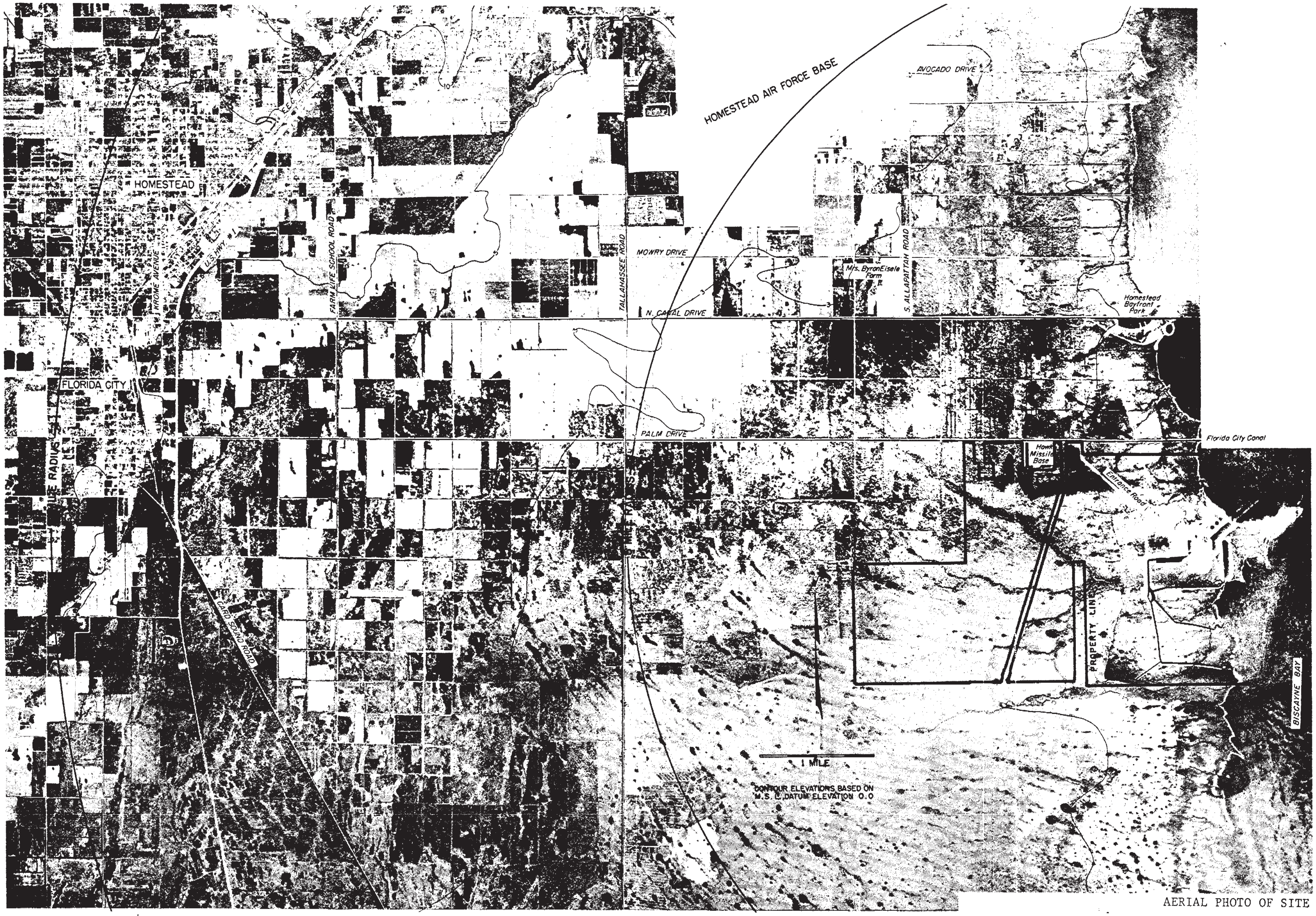
2.2 LOCATION

The site lies on the west shore of Biscayne Bay, in Sections 27, 28, 29, 31, 32, 33 and 34, Township 57 South, Range 40 East, Dade County, Florida, at latitude 25°-26'-04" North and longitude 80°-19'-52" West. This location is approximately 25 miles south of Miami, eight miles east of Florida City, and nine miles southeast of Homestead, Florida. Its location is shown on Figures 2.2-1, and 2.2-2 with the site plan shown on Figure 2.2-3.

The site comprises 3300 acres, more or less, owned by Florida Power & Light Company. The only access road is completely controlled by Florida Power & Light Company. The site has been developed to accommodate both nuclear and fossil-fired units.



GENERAL LOCATION MAP
FIG. 2.2-1



AERIAL PHOTO OF SITE

FIG. 2.2-2

FINAL SAFETY ANALYSIS REPORT

FIGURE 2.2-3

REFER TO ENGINEERING DRAWING

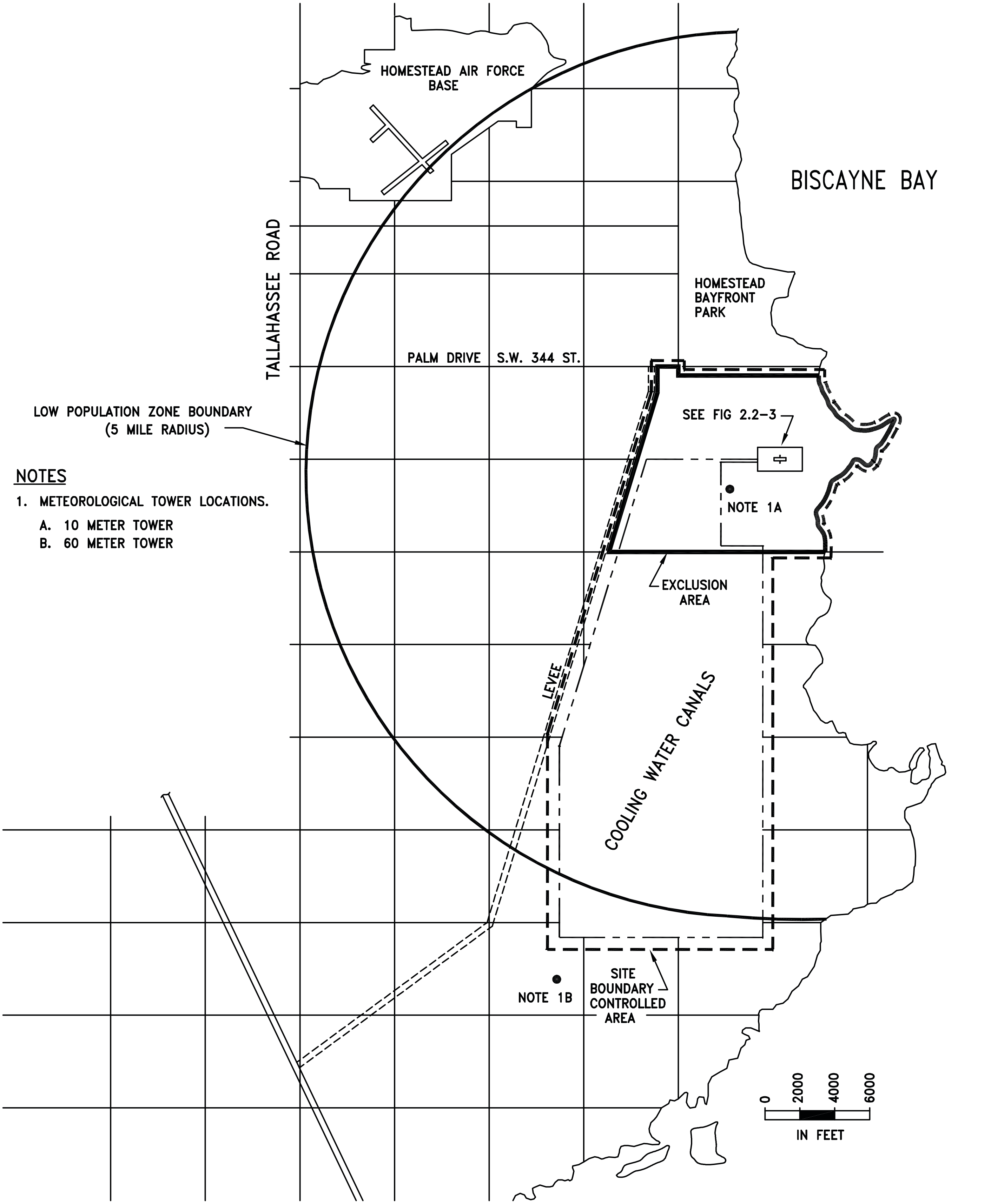
5610-C-2

REV. 16 (10/99)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3 & 4

GENERAL SITE FEATURES

FIGURE 2.2-3



NOTES

1. METEOROLOGICAL TOWER LOCATIONS.
   A. 10 METER TOWER
   B. 60 METER TOWER

09/09/2002

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT NUCLEAR UNITS 3 & 4

SITE AREA MAP

FIGURE 2.2-4

FTM00270.DWG

2.3 TOPOGRAPHY

The surface of the land in the Turkey Point area is flat and slopes very gently from an elevation of sea level at the shoreline up to an elevation of about 10 ft at a point some eight to nine miles inland.

The entire Dade County, Florida area is quite flat with the highest level on a ridge in the Miami area which parallels the shoreline. This ridge reaches an elevation of about 20 ft at its high point.

The land in and around the site comprises mangrove swamps from along the shoreline, extending inland three to four miles. Open fields extend westward from the edge of the swamp.

2.4 POPULATION DISTRIBUTION

This section presents updated population estimates for the area surrounding the Turkey Point Nuclear Power Plant. The population estimates for the 10 mile area surrounding the Turkey Point Nuclear Power Plant is based on information from the state of Florida Radiological Emergency Management Plan and is based on 1997 data. The 1990 population estimates for the 50 mile area surrounding the Turkey Point nuclear units is based on 1990 US Census figures. The 1995 population estimates are based on population changes from the 1980 Census and 1985 Dade County Traffic Analysis Zones (TAZs) data, and projections to 1995.

2.4.1 POPULATION WITHIN 10 MILES

In 1997 the Turkey Point Nuclear Power Plant, located in Dade County, Florida, has an estimated 139,833 people who reside within 10 miles of the plant. Figure 2.4-1 and Table 2.4-1 show the sector distribution of the resident population within 10 miles. All of the resident population within 10 miles of Turkey Point live between 5 and 10 miles.[1,3]

Cities, Towns and Settlements

Most of the area within 10 miles of the plant is in Dade County. A small portion of the 10-mile area, south and southeast of the plant, is in Monroe County. The largest population center within 10 miles is the city of Homestead in Dade County. The city of Homestead lies west, west-northwest and northwest of the plant. Most of its area is located between 5 and 10 miles of the plant, except for a small portion which extends beyond 10 miles from the plant.

Florida City lies immediately south of Homestead. Approximately 90% of Florida City's land area is within 10 miles of the plant.

The remainder of Turkey Point's 10-mile area is unincorporated. Most of the area south and southwest of the plant consists primarily of marshland and glades, and contains no resident population. The area west and northwest within 5 miles of Turkey Point consists mainly of agricultural land. Homestead Bayfront Park and the Biscayne National Park Headquarters are located approximately two miles north-northwest of the plant. There are no permanent residents within 5 miles of the plant. Northwest of the plant between 5 and 10 miles is the Homestead Air Reserve Base. Most of the Base is located in sector NW 5-10.

All of the residential development within 10 miles has occurred in sectors W 5-10 through N 5-10. The population in these sectors is concentrated on either side of US Highway 1, from Homestead/Florida City to the southern Miami suburbs.

That portion of Monroe County within Turkey Point's 10-mile radius includes the northern tip of Key Largo. Virtually all of the residents in this area can be found at the Ocean Reef Club. The Ocean Reef Club is a privately-owned community, used both as year-round and seasonal residences. The distinction between a year-round and seasonal residence is not clear, since many people may reside at the Club for six months out of the year. About 5,500 residents at the Club were estimated to be located within 10 miles of the plant.

Population by Annular Sectors

The most heavily populated annular sector within 10 miles of Turkey Point is sector WNW 5-10, with an estimated 44,013 residents. This annular sector includes the majority of Homestead's population, as well as a densely developed area off U.S. Highway 1 on the outskirts of Homestead, known as Leisure City.

Population by Annuli

The annuli within 5 miles of the plant contain very few residents. All of the resident population is situated in the 5- to 10-mile annulus, with a total population of 139,833.

Population by Sectors

Of the six sectors which have resident population, sector WNW has the highest population, with 44,013 people. The second highest is sector NW, with a total of 25,346 residents. This sector includes most of the residential developments at Homestead Air Reserve Base and dense developments off U.S. Highway 1, primarily along the southeast side of the highway.

Projected Future Population

The population within 10 miles of the Turkey Point plant is projected to increase by a little more than 4% over the next 5 years.

Growth in the vicinity of Homestead is expected to increase at a slightly faster rate than the 10-mile area as a whole. These projections are based on 1980 Census, 1985 TAZ, and 1990 Census figures.[1,12,13,19]

There are several new and expanding residential developments in the 10-mile area which may account for a portion of the area's moderate growth in the past and its projected growth in the future. The largest new development identified during a 1988 field study was Keys Gate at the Villages of Homestead, where 6,200 units are planned over a 12-year period.[33] This residential development is located in sector WNW 5-10. Sector NNW 5-10 includes the Cutler Landings and Hartford Square developments with a combined total of approximately 1,600 units. Another new development in sector N 5-10 is Lakes by the Bay, off of Old Cutler Road.[41] Sectors S, SSW, SW, and WSW out to 10 miles are not projected to be developed. This area includes primarily swamp land.

2.4.2 POPULATION WITHIN 50 MILES

The 1990 Census information estimated that approximately 2,613,535 people reside within 50 miles of the plant.[1] Figure 2.4-3 and Table 2.4-3 show the sector distribution of the resident population within 50 miles, in rose and tabular form, respectively.

Cities, Towns and Settlements

Four counties fall within 50 miles of the plant: Dade, Monroe, Broward and Collier. Dade County is entirely within the 50-mile boundary. A large majority of Monroe and Broward Counties also lie within the area, while only a small portion of Collier County falls in the 50-mile area. The largest population center within 50 miles of the plant is the City of Miami in Dade County. It extends out over the northern, northwestern, and northeastern sectors. The 1990 resident population in the City of Miami was 358,548.[1] The city experienced a population growth of about 3% over its 1980 population of 346,865.[13] A more substantial growth occurred in the area of Key Largo, in Monroe County, located in the southern and southwestern sectors. The population of Key Largo in 1990 was estimated at 11,336.[1] This is a 52% growth over the 1980 population of 7,447.[13] The largest city in Broward County, with a population of 143,444[1] in 1990, located within 50 miles of the plant is Fort Lauderdale. The population in this city experienced a 6% decrease over the 1980 population of 153,279 based on Census information.[13] Collier County contains no population within 50 miles of the plant.

Most of the area west and southwest of the plant between 10 and 50 miles consists primarily of marshland and glades, and contains little population. The eastern, southeastern, and northeastern sectors consist primarily of Atlantic Ocean. Aside from boaters and park visitors, there is no resident population in these sectors.

Population by Annular Sectors

The most heavily populated annular sector within 50 miles of Turkey Point is sector N 20-30, with an estimated 430,335 residents in 1990. This annular sector includes the majority of Miami's population, and Miami Beach.

Population by Annuli

The 20- to 30-mile annulus contains the largest population, with 902,461 residents. The second highest annulus with a population of 707,175 is from 30 to 40 miles. Again, this is due primarily to the intensive development north of the plant in the area of Miami and its suburbs.

Population by Sectors

Of the 11 sectors which have resident population, sector N has the highest population, with 1,330,570. The second highest is sector NNE, with a total of 972,816 residents. These sectors contain all of Miami's residents.

Projected Future Population

The population between 10 and 50 miles of the Turkey Point plant is projected to increase by approximately 11% over the next five years. The Census population from 1980 and 1990 as well as the percent growth rate for the four counties located within 50 miles is presented below.

County	1980 Census Data	1990 Census Data	% Growth (10 Years)
Broward	1,018,257	1,255,488	+23.3
Collier	85,971	152,099	+76.92
Dade	1,625,724	1,937,094	+19.15
Monroe	63,188	78,024	+23.48
TOTAL	2,793,140	3,422,705	+ 22 Average

Collier County does not contribute any population in the 50 mile area and, therefore, its growth rate does not affect these projections.

2.4.3 TRANSIENT POPULATION FOR YEARS 1990 AND 1995

The transient population includes both seasonal visitors staying at overnight accommodations and daily transients. Daily visitors may include persons attending special events and visiting local attractions. Persons attending colleges and major employment facilities constitute daily transients as well. However, many of the daily visitors are also residents in the area, and it is difficult to determine how many of these visitors are also residents.

The population figures presented in this report are based on the estimates from known events in the EPZ. The estimated peak 1990 number of transients expected within 10 miles of Turkey Point was about 21,019. This is presented in Figure 2.4-5 and Table 2.4-5, in rose and tabular form, respectively. The resultant 1995 transient population within 10 miles is presented in Figure 2.4-6 and Table 2.4-6. The transient population in the 50-mile area was not determined in this study. The transient population components are listed below.

Tourists and Seasonal Visitors

The Turkey Point 10-mile area does not experience a significant influx of transient visitors during the winter months. The area does not particularly cater to tourists, since the lack of usable shoreline (i.e., sandy beaches) has prevented the development of major resort facilities. The largest influx of seasonal residents can be found at the Ocean Reef Club in Key Largo. The Ocean Reef Club is a private resort located on the northern tip of Key Largo in Monroe County. It is in annular sector SSE 5-10. The resort has about 1,200 single-family, multi-family, and tourist accommodations.[12,23] In 1988, the Ocean Reef Club was the only resort within 10 miles of Turkey Point.

There are a number of hotel/motel accommodations within 10 miles of Turkey Point in Dade County, most of these being in the Homestead/Florida City area. There are also several campgrounds in the area for visitors using recreational vehicles. The number of seasonal visitors staying at private residences in the 10-mile area was estimated based on the percentage of seasonal units as published in the 1980 U.S. Census of Housing.[14] Since the nature of the area has not changed significantly in the past few years, this approach was deemed to be appropriate for the Turkey Point area. The total number of overnight tourist and seasonal visitors within 10 miles of the plant was estimated to be 7,396 in 1990. In 1995, the number of seasonal visitors was projected to increase to 8,129. Many of the residents at the Club are accounted for as permanent residents and are included in Section 2.4.1. The remaining were considered to be seasonal residents.

Major Attractions and Events

The Homestead Bayfront Park and Biscayne National Park are the two major recreational parks in the Turkey Point 10-mile area. Both parks, located adjacent to one another are in annular sectors N 1-2 and NNW 1-2. Homestead Bayfront Park is a large recreational park south of the North Canal on Biscayne Bay which also includes a marina. Over 6,000 visitors may attend this park during one week.(37) On the northern side of the Canal is the Biscayne National Park Headquarters. Biscayne National Park includes much of the shoreline from Turkey Point north to Key Biscayne, Biscayne Bay and a number of outer islands. Elliot Key, one of the park's islands, includes a recreational area with a visitor center and camping facilities. In 1987, almost 608,000 visitors attended Biscayne National Park.(36) The Homestead MotorSports Complex, located approximately 5.1 miles west of the plant, currently plans to host at least five major events each year, in addition to several dozen smaller events throughout the year. The complex has a maximum capacity of 65,000 people. Table 2.4-7 shows the estimated 1990 and 1995 population associated with the recreational facilities identified within 10 miles of Turkey Point. A ballpark is located approximately 8 miles west of the plant.

The population associated with major special events is listed in Table 2.4-8. The largest events are those associated with the Homestead MotorSports Complex during major events each year. These events attract about 65,000 visitors. In addition, Homestead Frontier Days attracts about 50,000 visitors during two weeks in January and February. During the two weeks, a number of special attractions are open to the public including the Homestead Rodeo, BMX National Bicycle Race and the Antique Car Show.(18) These individual events attract thousands of visitors to the area. It is difficult to distinguish between those visitors that live inside the 10-mile radius and those that live outside of it. For the purposes of this study, the peak one-day attendance associated with the Homestead Rodeo has been included in the daily transient population, assuming that 50% of the visitors live beyond the 10-mile radius.

Population at Major Industrial Facilities

Major employment facilities within 10 miles of the plant were identified in 1988 from industrial directories.[7,8] Facilities with at least 50 employees were included in this population segment. Table 2.4-9 lists the employment facilities identified. The Homestead Air Reserve Base was the largest employer in the Turkey Point 10-mile area, employing about 1,900 non-military personnel in 1988.[20] This number was substantially reduced following Hurricane Andrew in 1992. It is reasonable to assume that many of the employees within 10 miles are probably also residents of the area. For this reason, it was assumed that about half of the employees live beyond the plant's 10-mile radius and would therefore contribute to the transient population segment.

Population at Major Colleges

Miami-Dade Community College has a branch within the Turkey Point 10 mile radius. The estimated student population is about 2,100 students. The Homestead Branch also employed about 70 personnel. In addition to Miami-Dade Community College, Florida International University conducts classes at the Homestead Branch. The estimated Student and staff population includes those from Florida International University. As with employees, students attending colleges in the area were included in the transient population segment assuming that 50% of them live beyond the 10-mile area.

2.4.4 LOW POPULATION ZONE

There are no residents within the Turkey Point low population zone (LPZ), based on 1990 Census data. Homestead Bayfront Park is the closest recreational area to the plant and is about two miles north of the plant. About 900 visitors may be present during a peak day at the park. Immediately north is the Biscayne National Park Headquarters in annular sectors N 1-2 and NNW 1-2.

2.4.5 POPULATION CENTER

The closest population center of 25,000 residents or more, is the city of Homestead. Homestead has a 1990 population of about 26,866.[1] Homestead's political boundary is about five miles from the plant at its closest point.[26] However, no resident population exists at this distance from the plant. The nearest populated area of the city of Homestead lies about 7.0 miles west of the plant.

2.4.6 POPULATION DENSITY

The cumulative population densities within 10 miles and 50 miles of the Turkey Point plant are presented in Tables 2.4-11 and 2.4-12, respectively. Sector
WNW has the highest cumulative population density with an average of 1,885 persons/square mile in the 10-mile area and sector N in the 50-mile area with 2,711. A large portion of the city of Homestead is located within the WNW sector in the 10-mile area and a large portion of Miami is in the N sector. The cumulative population densities presented in Tables 2.4-11 and 2.4-12 show that in 1990, of the six sectors within 10 miles which contain residents, five annular sectors exceed 500 persons/square mile. Sixteen annular sectors in the 50-mile area exceed 500 persons/square mile.

2.4.7 METHODOLOGY FOR ESTIMATING THE 1990/1995 RESIDENT POPULATION

The methodology used to estimate the 1990 and project the 1995 resident population within 10 miles of the Turkey Point Nuclear Power Plant are outlined below:

1. 1990 population and 1980 population and housing information was collected from the U.S. Census Bureau,[1,12,13,14] and the State of Florida Division of Population Studies.[3,4] In addition, the 1985 population by Traffic Analysis Zone was obtained from the Metro-Dade Transit Agency.[19,25]

2. U.S. Geological Survey (USGS) maps[2] and Census Bureau maps[1] were obtained. The site's reactor center was used as the centerpoint for both the 10- and 50-mile area population estimates.
   Computer-generated

circles at distances of 1, 2, 3, 4, 5, and 10 miles from the plant were overlayed onto maps for the 10-mile estimate and at 10, 20, 30, 40, and 50 miles for the 50-mile estimate. These computer generated circles were also divided into 22.5 degree sectors representing the 16 cardinal compass points.

3. The final 1990 resident population distribution for the 10- and 50-mile areas was estimated and disaggregated to sectors based on 1990 Census tract boundaries for Dade, Monroe, Broward, and Collier counties. The total population within each Census Tract was disaggregated to sectors based on the estimated percentage of population within each sector, as determined through further breakdown of Census Blocks.

4. The 1995 resident population within 10 miles was projected based on the growth trends of the 10-mile area in the past 5 to 10 years. The 1985 Traffic Analysis Zone boundaries falling within each 1990 Census Tract were examined to estimate the 1985 population within each Census Tract. The growth rate between 1985 and 1990 was then calculated. An average growth rate for each sector was then calculated based on the Census Tracts included within a particular sector. The only exception to this was a slightly different methodology used for the Western sector, where TAZ and Census Tract boundaries could not be easily correlated with each other. In this case, the average growth rate of the combined populations of Homestead and Florida City, based on the 1980 and 1990 Census, was applied since these two municipalities make up essentially all of the population within the Western sector.

   The 1995 resident population for the 10- to 50-mile area was projected based on the average growth rate of the counties within 50 miles of the plant, as determined through 1980 and 1990 U.S. Census figures. A calculated growth rate of 11% was applied to the 1990 estimate, for developing the 1995 projections. The same distribution used for 1990 was applied to the 1995 projections.

2.4.8 METHODOLOGY FOR ESTIMATING THE 1990/1995 TRANSIENT POPULATION

The transient population within 10 miles of the plant was estimated based on the number of seasonal overnight visitors and daily visitors. Overnight visitors include seasonal residents, and persons on vacation staying at hotels/motels, campgrounds or with friends. Daily visitors may include those persons attending special events, visiting major attractions, working in the area, or attending major colleges.

In 1988, a field and telephone survey was conducted for the 10-mile area to identify facilities and events associated with the transient population. At that time, the transient population was also projected to 1993 based on the overall growth rate of the 10-mile area. The 1990 transient population presented in this report is based on the information collected in 1988. The 1990 figures were interpolated from the 1988 and 1993 estimates. The 1995 projections for the transient population were also based on the 1988 data, and extend the 1993 projections for two additional years. Each component of the transient population is discussed in more detail below. The methodologies described below outline the procedures carried out during the 1988 study. Where appropriate, additional explanations are provided based on 1990 data.

<u>Overnight Population</u>

The number of seasonal visitors staying at hotels and motels within 10 miles of the plant was calculated based on the number of units at each facility and the specific location of them. The total number of units was multiplied by an average occupancy rate of 2.0 persons per room to calculate the total population associated with these overnight accommodations. Sources used to identify these tourist accommodations included telephone directories,[11] Chamber of Commerce publications,[21,22] and a field survey conducted in 1988.[5]

The number of seasonal visitors at the Ocean Reef Club on Key Largo was calculated based on the estimated number of units at the Club and using an average occupancy factor of 2.0 persons per unit. Approximately half of these residents were counted by the 1990 U.S. Census as permanent residents. The remaining residents were considered seasonal for the purposes of this study.

Since the 10-mile area within Dade County does not provide much in the way of tourist amenities, the number of visitors staying at private residences was not considered to be significant. According to the 1980 U.S. Census of Housing, approximately 0.5% of all housing units in the area were used by seasonal visitors.[14] This same percentage was applied to the 1990 resident estimates to calculate the number of seasonal visitors staying at private residences.

Transient Population at Recreational Attractions and Events

In order to estimate the population at the two major recreational areas within 10 miles of the plant, Biscayne National Park and Bayfront Park, personnel at each of these facilities were contacted.[36,37] At Biscayne National Park, the yearly attendance level was divided by 365 days to estimate a daily attendance at the park. The number of visitors at Elliot Key was estimated based on the yearly number of persons counted at the Visitor Center, the maximum capacity of boat tours to the island[42] and the number of campsites available. At Bayfront Park, a weekly visitor total was divided by seven days to estimate the daily attendance at the park.

The Homestead Motor Sports Complex is located just outside the 5-mile radius of the plant. The capacity of the Homestead MotorSports Complex (HMC) is approximately 65,000 people, and is estimated to hold at least 5 sanctioned events annually.

The capacity of the Homestead Baseball Stadium is approximately 9500.

The highest average daily attendance for a single event (Rodeo) during Homestead Frontier Days in Homestead was used to calculate the daily transient population associated with this major recreational event. Since many of the visitors to this yearly event may also be residents, it was assumed that 50% of these visitors contribute to the transient population and the other 50% are already accounted for in the resident or overnight population.

Transient Population at Major Employment Facilities

The largest employers in the 10-mile area have been listed in Table 2.4-9, along with the number of employees at these facilities as determined during the 1988 field study.[7,8] It is reasonable to assume that many of these employees are probably also residents of the area. For this reason, it was assumed that about half of the employees live beyond the plant's 10-mile radius and would therefore contribute to the transient population segment. The employee population was allocated to annular sectors based on the particular location of each facility.

Transient Population at Major Colleges

The number of students attending colleges within 10 miles of the plant was obtained by contacting each facility.[45,46,] Since students attending college may travel some distance, it was assumed that, as with employees, of the students attending college in the area, 50% of them live beyond the 10-mile area, and therefore, contribute to the total transient population estimate.

2.4.9 POPULATION PROJECTIONS FOR YEARS 2000, 2005, 2010, AND 2013

The 1990 population for the 10- and 50-mile areas surrounding the Turkey Point Nuclear Power Plant were estimated based on the 1990 US Census figures. The 1995 population was generally based on the change between 1980 and 1990, and projected to 1995. For long term population estimates, the County-wide projections for each of the counties within 50 miles of the plant were used to estimate the population in the years 2000, 2005, 2010 and 2013. The methodology used is described below. The results are presented in the Tables 2.4-13 through 2.4-16.

Methodology for Projecting the Population

Population projections were collected from the Dade County Planning Commission, the Broward County Planning Council and the Monroe County Planning Office. The projected growth rates were applied using the 1990 Census as a base, rather than the 1995 projections performed previously, since the Census data is a widely accepted standard.

In Dade County, projections were available for the years 2000, 2005 and 2010. The County population for the year 2013 was projected from the change between the 2005 and 2010 figures. The County population growth projections were applied to the Dade County 1990 US Census Tracts within 50 miles of the plant. The same distribution as 1990 and 1995 was used for the subsequent years.

In Broward County, projections were available for the years 2000, 2005 and 2010. The change between 2005 and 2010 was used to project the County population to the year 2013. However, the projections were developed prior to the 1990 US Census and the County's previously projected population for 1990 was approximately 5% higher than the actual 1990 US Census count. The Broward County Planning Council is currently in the process of reconciling this discrepancy. For the purposes of this study, the projections developed by the County prior to the Census count were reduced by 5%, based on this difference. The resultant growth projections were applied to the Broward County 1990 US Census Tracts within 50 miles of the plant. The same distribution as 1990 and 1995 was used for the future projections.

In Monroe County, projections were available for the years 2000, 2010 and 2020. The 2005 population was interpolated from the 2000 and 2010 populations, and the 2013 population was interpolated from the 2010 and 2020 figures. The County growth projections were applied to the Monroe County 1990 US Census Tracts within 50 miles of the plant. The only exception was the area of Key Largo within 10 miles of the plant at the Ocean Reef Club. Key Largo experienced a substantial population increase between 1980 and 1990 (based on the US Census), and the 1995 population projection was based on a higher growth rate than the County as a whole. Therefore, although the same methodology was used, the 1995 projected population was used as the starting point instead of 1990. The same distribution as 1990 and 1995 was used for the future projections.

2.4.10 REFERENCES

1. 1990 Census of Population - Census Tract and Maps Block Data, Bureau of the Census; received from Florida State University.

2. United States Geological Survey topographic maps; revised 1988.

3. "Number of Households and Average Household Size in Florida - April 1, 1986", Population Studies Bulletin No. 79, Stanley K. Smith and Jane Bucca, February 1987.

4. "Counties Population Estimates by Age, Sex and Race - April 1, 1986", Population Studies Bulletin No. 81, Stanley K. Smith and Vachir Ahmed, April 1987.

5. Field survey of 10-mile radius around Turkey Point Nuclear Power Plant, February 1988.

6. Florida Department of Transportation, Topographic Bureau, aerial photographs of Turkey Point 10-mile area, 1985.

7. Directory of Florida Industries 1986-1987, The Florida Chamber of Commerce Management Corporation, Tallahassee, Florida.

8. Florida Manufacturers Register - 1987, Manufacturers News, Chicago, Florida.

9. "Guide to Florida Campgrounds", Jim Stachowicz, Windward Publishing, Miami, Florida, 1981.

10. Florida Applied Demographics, Tallahassee, Florida.

11. Telephone Directory for Homestead; Southern Bell, 1987-1988.

12. 1980 U.S. Census Population and Housing Counts by Enumeration District, Florida State University Computing Center.

13. "1980 Census of Population - General Population Characteristics", Florida PC80-1-B11 Bureau of the Census, U.S. Department of Commerce, issued August 1982.

14. "1980 Census of Housing - General Housing Characteristics", Florida, Bureau of the Census, U.S. Department of Commerce.

2.4.10 REFERENCES (Cont'd)

15. "Tourism: Lodging", <u>The Florida Almanac 1986-87</u>; edited by Del Marth & Marth.

16. 1987 State Profile - Woods & Poole Economics, May 1987.

17. <u>1986 Florida Statistical Abstract</u>, Bureau of Economic and Business Research, University of Florida, 1986.

18. Florida Media Guide, January-June 1988; Florida Department of Commerce, Division of Tourism, Tallahassee, Florida.

19. Information Officer, Metro Dade Planning Commission, Miami, Florida, Personal Communication, December 1987 and February 1988.

20. "Recreation-Housing Facts", Greater Homestead Economic Development Corporation, Homestead Chamber of Commerce.

21. Homestead/Florida City Chamber of Commerce, Personal Communication, February 1988.

22. AAA Tour Book - Florida, 1988.

23. Club Attendant, Ocean Reef Club, Key Largo, Personal Communication, February 1988.

24. Ocean Reef Club Properties, Services, Location and Housing Map.

25. Metro-Dade Transit Agency, TAZ and district map and letter dated January, 1988.

26. Trakker's Map of Miami Area Florida Street Map, Trakker Maps, Inc., 1987 Edition.

27. Manager, Grandma Newton's Bed and Breakfast, Personal Communication, February 1988.

28. Manager, Kent Motel, Homestead, Personal Communication, February 1988.

29. Manager, Deluxe Inn Motel, Leisure City, Florida, Personal Communication, February 1988.

30. Manager, Econo-Lodge, Personal Communication, February 1988.

2.4.10 REFERENCES (Cont'd)

31. Manager, Park Motel, Personal Communication, February 1988.

32. Manager, Lucy's Motel, Personal Communication, February 1988.

33. Manager, Keys Gate at the Village of Homestead, Homestead, Personal Communication, February 1988.

34. Manager, San Remo Townhomes, Homestead, Florida, Personal Communication, February 1988.

35. Manager, Hartford Square, Personal Communication, February 1988.

36. Supervisory Park Ranger, Biscayne National Park, Personal Communication, February 1988.

37. Manager, Homestead Bayfront Park and Marina, Personal Communication, February 1988.

38. Manager, Royal Colonial Mobile Home Estates, Personal Communication, February 1988.

39. Manager, Goldcoaster Mobile Home and Travel Trailer Park, Personal Communication, February 1988.

40. Manager, Cutler Landings, Personal Communication, February 1988.

41. Manager, Lakes By the Bay, Florida Personal Communication, February 1988.

42. Boat Captain, Biscayne Aqua Center, Personal Communication, February 1988.

43. Management Information Services, Florida Department of Education, Tallahassee, Florida, Personal Communication, February 1988.

44. Branch Manager, American Red Cross, Greater Miami Chapter, Personal Communication, March 1988.

45. Student Information. Miami Dade Community College, Homestead Branch, Personal Communication, March 1988.

46. Student Information, Florida International University, Homestead Branch, Personal Communication, May 1998.

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TABLE 2.4-1

RESIDENT POPULATION
WITHIN 10 MILES
OF TURKEY POINT PLANT*

DIRECTION	DISTANCE (MILES) 0-1	1-2	2-3	3-4	4-5	5-10	TOTAL 0-10
N	2,635	2,500	0	0	0	25,052	30,187
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	5,500	5,500
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	14,129	14,129
WNW	0	0	0	0	0	44,013	44,013
NW	0	0	0	0	0	25,346	25,346
NNW	0	0	0	0	0	20,658	20,658
TOTAL	2,635	2,500	0	0	0	134,698	139,833

- Based on the State of Florida 1997 resident population distribution within 10 miles of Turkey Point (Figure 2.4-1).

TABLE 2.4-2

1995 PROJECTED RESIDENT POPULATION
WITHIN 10 MILES
OF TURKEY POINT PLANT

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TABLE 2.4-3

1990 RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT PLANT*

DIRECTION	DISTANCE (MILES) 0-10	10-20	20-30	30-40	40-50	TOTAL 0-50
N	15,799	213,226	430,335	350,347	320,863	1,330,570
NNE	0	9,746	429,713	349,676	183,681	972,816
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	0	0	0	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	0	0	0	0
SSE	1427	0	0	0	0	1,427
S	0	1,223	333	0	0	1,556
SSW	0	726	9,826	6,876	1,591	19,019
SW	0	0	0	0	45	45
WSW	0	0	0	58	190	248
W	10,641	521	0	0	0	11,162
WNW	37,006	15,205	0	0	23	52,234
NW	24,813	8,699	0	0	0	33,512
NNW	15,993	142,481	32,254	218	0	190,946
TOTAL	105,679	391,827	902,461	707,175	506,393	2,613,535

* Based on the 1990 U.S. Census.

TABLE 2.4-4

1995 PROJECTED RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT PLANT*

	DISTANCE (MILES)					TOTAL
DIRECTION	0-10	10-20	20-30	30-40	40-50	0-50
N	16,115	236,681	477,672	388,885	356,158	1,475,511
NNE	0	10,818	476,981	388,140	203,886	1,079,826
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	0	0	0	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	0	0	0	0
SSE	1,783	0	0	0	0	1,783
S	0	1,358	370	0	0	1,727
SSW	0	806	10,907	7,632	1,766	21,111
SW	0	0	0	0	50	50
WSW	0	0	0	64	211	275
W	11,812	578	0	0	0	12,390
WNW	38,856	16,878	0	0	26	55,760
NW	24,838	9,656	0	0	0	34,494
NNW	16,633	158,154	35,802	242	0	210,831
TOTAL	110,037	434,929	1,001,732	784,963	562,097	2,893,758

* Based on the growth rate calculated for the 10-mile area, as well as the average growth rate for the counties within 50 miles as determined from 1980 and 1990 Census information for the 10- to 50-mile area.

TABLE 2.4-5

1990 PEAK SEASONAL AND DAILY VISITORS
WITHIN 10 MILES
OF TURKEY POINT PLANT

DIRECTION	DISTANCE (MILES) 0-1	1-2	2-3	3-4	4-5	5-10	TOTAL 0-10
N	0	698	0	0	0	85	783
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	284	284
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	1,350	1,350
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	92	92
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	3,489	3,489
WNW	0	0	0	0	0	10,609	10,609
NW	0	0	0	0	0	2,690	2,690
NNW	0	1,602	0	0	0	120	1,722
TOTAL	0	2,300	0	0	0	18,719	21,019

TABLE 2.4-6

1995 PROJECTED PEAK SEASONAL AND DAILY VISITORS
WITHIN 10 MILES
OF TURKEY POINT PLANT

DISTANCE (MILES)

DIRECTION	0-1	1-2	2-3	3-4	4-5	5-10	TOTAL 0-10
N	0	780	0	0	0	94	874
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	319	319
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	1,350	1,350
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	103	103
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	3,916	3,916
WNW	0	0	0	0	0	11,968	11,968
NW	0	0	0	0	0	3,148	3,148
NNW	0	1,795	0	0	0	134	1,929
TOTAL	0	2,575	0	0	0	21,032	23,607

TABLE 2.4-7

VISITORS TO RECREATIONAL FACILITIES
WITHIN 10 MILES
OF TURKEY POINT PLANT

Facility Name	Sector	DAILY VISITORS TO RECREATIONAL AREAS		
		1988 Study	1990 Estimate[3]	1995 Estimate[3]
Biscayne National Park	N 1-2/ NNW 1-2/ E 5-10	1,600[1]	1,680	1,880
Homestead Bayfront Park and Marina	NNW 1-2	860	904	1,014
Coral Castle	WNW 5-10	100[2]	105	118
TOTAL		2560	2,689	3,012

NOTES:

1. Includes about 270 visitors to Elliot Key Island.

2. Since no information was available, the number of visitors has been assumed.

3. Estimates based on 1988 and 1993 projection figures determined in the 1988 study.

TABLE 2.4-8

VISITORS TO MAJOR SPECIAL EVENTS
WITHIN 10 MILES
OF TURKEY POINT PLANT

				PEAK ONE DAY ATTENDANCE		
Special Event	Location	Sector	Time	1988 Study	1990 Estimate(1)	1995 Estimate(1)
HOMESTEAD:						
Homestead Frontier Days	Harris Field	WNW5-10	Jan. 23-Feb. 7	16,500	17,340	19,440
- Antique Car Show	Harris Field	WNW5-10	Jan. 23-Jan. 24			
- BMX National Bicycle Race	BMX Track	WNW5-10	Jan. 30			
- Rodeo	Harris Field	WNW5-10	Feb. 5-7			
Homestead Motor- 65,000(2) Sports Complex (HMC)	HMC Track	WNW 5	Various(2)			

NOTES:

1. Estimates based on 1988 and 1993 projected figures determined in the 1988 study.

2. Maximum capacity of MotorSports Complex for various events scheduled throughout the year.

TABLE 2.4-9

MAJOR EMPLOYMENT FACILITIES
WITHIN 10 MILES
OF TURKEY POINT PLANT

		NUMBER OF EMPLOYEES
Homestead Study	Sector	1988
Atlantic Fertilizer & Chemical Co.	NW 5-10	65
Coca Cola Bottling Company of Homestead	W 5-10	50
Florida Rock & Sand	SW 5-10	175
South Dade News Leader	WNW 5-10	100
Homestead Reserve Base (Civilian)	NW 5-10	1,900
TOTAL POPULATION 1988		2,290
POPULATION ESTIMATE 1990		2,407[1]
PROJECTED POPULATION ESTIMATE 1995		2,700[1]

NOTES:

1. Estimates based on 1988 and 1993 projected figures determined in the 1988 study.

TABLE 2.4-10

MAJOR COLLEGES
WITHIN 10 MILES
OF TURKEY POINT PLANT

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TABLE 2.4-11

CUMULATIVE POPULATION DENSITY BY ANNULAR SECTOR
WITHIN 10 MILES
OF TURKEY POINT PLANT*

CUMULATIVE POPULATION 1990

Annulus Miles	N	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0-1	0	0	0	0	0	0	0	0	0	0	0
0-2	0	0	0	0	0	0	0	0	0	0	0
0-3	0	0	0	0	0	0	0	0	0	0	0
0-4	0	0	0	0	0	0	0	0	0	0	0
0-5	0	0	0	0	0	0	0	0	0	0	0
0-10	15,799	1,427	0	0	0	0	10,641	37,006	24,813	15,993	105,679

CUMULATIVE POPULATION DENSITY
PER SQUARE MILE

Annulus Miles	N	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Annular Average
0-1	0	0	0	0	0	0	0	0	0	0	0
0-2	0	0	0	0	0	0	0	0	0	0	0
0-3	0	0	0	0	0	0	0	0	0	0	0
0-4	0	0	0	0	0	0	0	0	0	0	0
0-5	0	0	0	0	0	0	0	0	0	0	0
0-10	805	73	0	0	0	0	542	1,885	1,264	815	538

CUMULATIVE POPULATION DENSITY COMPARED WITH
A DENSITY OF 500 PERSONS/PER SQUARE MILE

Annulus Miles	N	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Annular Average
0-1	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
0-2	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
0-3	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
0-4	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
0-5	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
0-10	+305	-427	-500	-500	-500	-500	+42	+1,385	+764	+315	+38

* Excluding sectors NNE through SE which are in the Atlantic Ocean.

TABLE 2.4-12

CUMULATIVE POPULATION DENSITY BY ANNULAR SECTOR
WITHIN 50 MILES
OF TURKEY POINT PLANT*

CUMULATIVE POPULATION 1990

Annulus Miles	N	NNE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Annular Total
0-10	15,799	0	1,427	0	0	0	0	10,641	37,006	24,813	15,993	105,679
0-20	229,025	9,746	1,427	1,223	726	0	0	11,162	52,211	33,512	158,474	497,506
0-30	659,360	439,459	1,427	1,556	10,552	0	0	11,162	52,211	33,512	190,728	1,399,967
0-40	1,009,707	789,135	1,427	1,556	17,428	0	58	11,162	52,211	33,512	190,945	2,107,142
0-50	1,330,570	972,816	1,427	1,556	19,019	45	248	11,162	52,234	33,512	190,945	2,613,535

CUMULATIVE POPULATION DENSITY
PER SQUARE MILE

Annulus Miles	N	NNE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Annular Average
0-10	805	0	73	0	0	0	0	542	1,885	1,264	815	538
0-20	2,916	124	18	16	9	0	0	142	665	427	2,018	576
0-30	3,731	2,487	8	9	60	0	0	63	296	190	1,079	721
0-40	3,214	2,512	5	5	56	0	0	36	166	107	608	610
0-50	2,711	1,982	3	3	39	0	1	23	106	68	389	484

CUMULATIVE POPULATION DENSITY COMPARED WITH
A DENSITY OF 500 PERSONS/PER SQUARE MILE

Annulus Miles	N	NNE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Annular Average
0-10	+305	-500	-427	-500	-500	-500	-500	+42	+1,385	+764	+315	+38
0-20	+2,416	-376	-482	-484	-491	-500	-500	-358	+165	-73	+1,518	+76
0-30	+3,231	+1,987	-492	-491	-440	-500	-500	-437	-204	-310	+579	+221
0-40	+2,714	+2,012	-495	-500	-445	-500	-500	-464	-334	-393	+108	+110
0-50	+2,211	+1,482	-497	-497	-461	-500	-499	-477	-394	-432	-111	-16

* Excluding sectors NE through SE which are in the Atlantic Ocean.

TABLE 2.4-13

2000 RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT PLANT*

DIRECTION	0-5	5-10	10-20	20-30	30-40	40-50	TOTAL 0-50
			DISTANCE (MILES)				
N	0	18,438	248,834	502,201	410,369	378,939	1,558,781
NNE	0	0	11,374	501,476	408,877	216,927	1,138,654
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	1,890	0	0	0	0	1,890
S	0	0	1,381	376	0	0	1,757
SSW	0	0	819	11,093	7,763	1,796	21,471
SW	0	0	0	0	0	51	51
WSW	0	0	0	0	66	215	281
W	0	12,418	608	0	0	0	13,026
WNW	0	43,186	17,745	0	0	26	60,957
NW	0	28,957	10,152	0	0	0	39,109
NNW	0	18,663	166,275	37,640	254	0	222,832
TOTAL	0	123,552	457,188	1,052,786	827,329	597,954	3,058,809

* Based on county-wide growth projections obtained from the Dade County Planning Commission, the Broward Planning Council and the Monroe County Planning Office.

TABLE 2.4-14

2005 RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT PLANT*

	DISTANCE (MILES)						
DIRECTION	0-5	5-10	10-20	20-30	30-40	40-50	TOTAL 0-50
N	0	19,673	265,506	535,849	436,459	400,160	1,657,647
NNE	0	0	12,136	535,074	435,525	229,075	1,211,810
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	1,953	0	0	0	0	1,953
S	0	0	1,426	388	0	0	1,814
SSW	0	0	846	11,459	8,019	1,856	22,180
SW	0	0	0	0	0	53	53
WSW	0	0	0	0	68	222	290
W	0	13,250	649	0	0	0	13,899
WNW	0	46,079	18,475	0	0	27	64,581
NW	0	30,897	10,832	0	0	0	41,729
NNW	0	19,914	177,415	40,162	271	0	237,762
TOTAL	0	131,766	487,285	1,122,932	880,342	631,393	3,253,718

* Based on county-wide growth projections obtained from the Dade County Planning Commission, the Broward Planning Council and the Monroe County Planning Office.

TABLE 2.4-15

2010 RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT NUCLEAR PLANT*

	DISTANCE (MILES)						
DIRECTION	0-5	5-10	10-20	20-30	30-40	40-50	TOTAL 0-50
N	0	20,853	281,437	568,000	460,218	416,784	1,747,292
NNE	0	0	12,864	567,179	460,367	238,696	1,279,106
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	2,015	0	0	0	0	2,015
S	0	0	1,472	401	0	0	1,873
SSW	0	0	873	11,826	8,276	1,915	22,890
SW	0	0	0	0	0	54	54
WSW	0	0	0	0	70	229	299
W	0	14,045	688	0	0	0	14,733
WNW	0	48,844	19,583	0	0	28	68,455
NW	0	32,751	11,482	0	0	0	44,233
NNW	0	21,109	188,060	42,572	287	0	252,028
TOTAL	0	139,617	516,459	1,189,978	929,218	657,706	3,432,978

* Based on county-wide growth projections obtained from the Dade County Planning Commission, the Broward Planning Council and the Monroe County Planning Office.

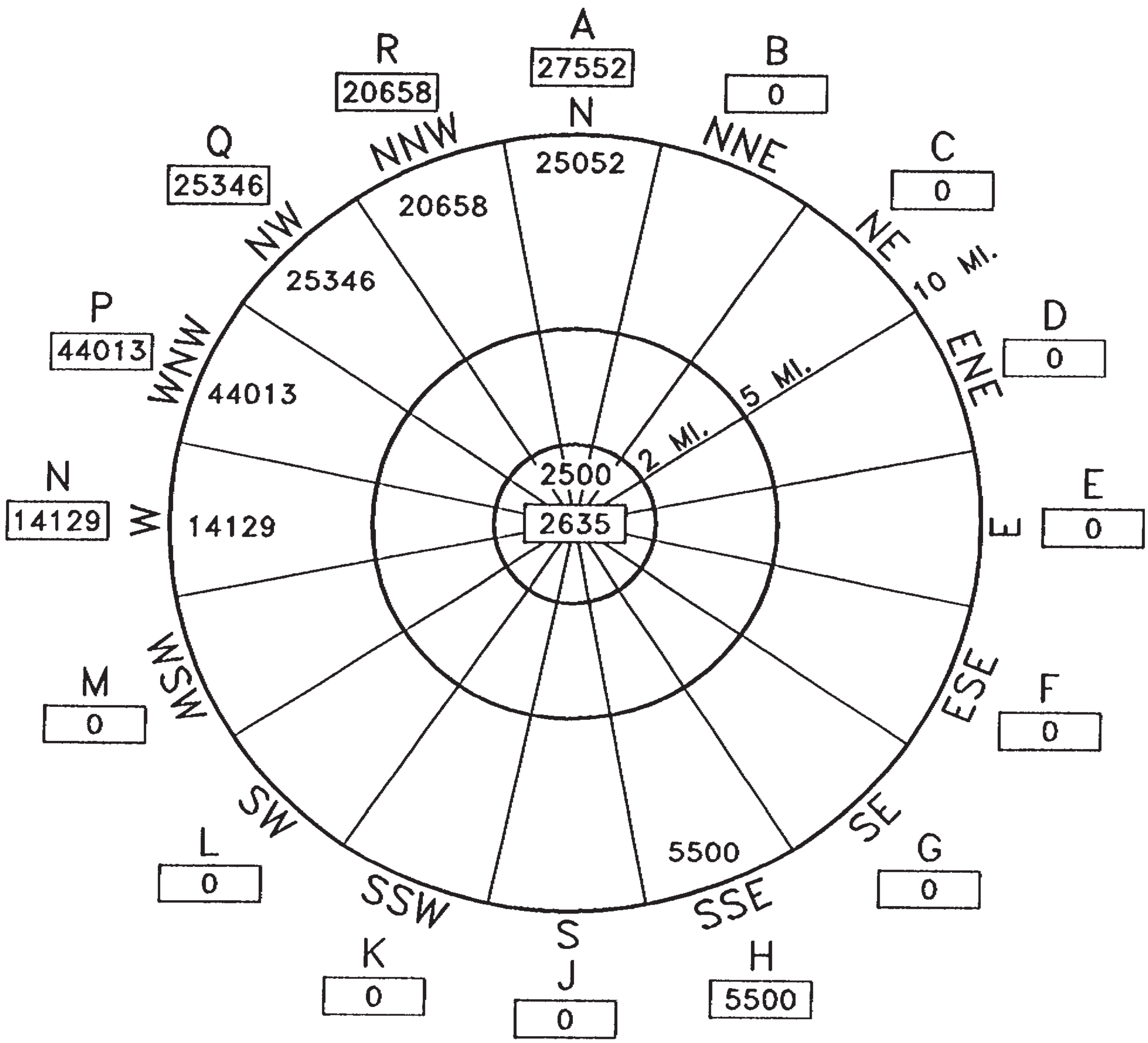
TABLE 2.4-16

2013 RESIDENT POPULATION
WITHIN 50 MILES
OF TURKEY POINT PLANT*

DISTANCE (MILES)

DIRECTION	0-5	5-10	10-20	20-30	30-40	40-50	TOTAL 0-50
N	0	21,604	291,568	588,448	475,240	427,391	1,804,251
NNE	0	0	13,327	587,597	476,118	244,664	1,321,706
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	2,082	0	0	0	0	2,082
S	0	0	1,521	414	0	0	1,935
SSW	0	0	902	12,216	8,549	1,915	23,582
SW	0	0	0	0	0	56	56
WSW	0	0	0	0	72	236	308
W	0	14,551	713	0	0	0	15,264
WNW	0	50,602	20,288	0	0	29	70,919
NW	0	33,930	11,895	0	0	0	45,825
NNW	0	21,869	194,830	44,104	298	0	261,101
TOTAL	0	144,638	535,044	1,232,779	960,277	674,291	3,547,029

* Based on county-wide growth projections obtained from the Dade County Planning Commission, the Broward Planning Council and the Monroe County Planning Office.



139,833*

Total Segment Population – 0 to 10 Miles

* Includes Transient Population

(within 2 mile ring, there are no permanent residents)

POPULATION TOTALS			
RING MILES	RING POPULATION	TOTAL MILES	CUMULATIVE POPULATION
0–2	5,135	0–2	5,135
2–5	–	0–5	5,135
5–10	134,698	0–10	139,833

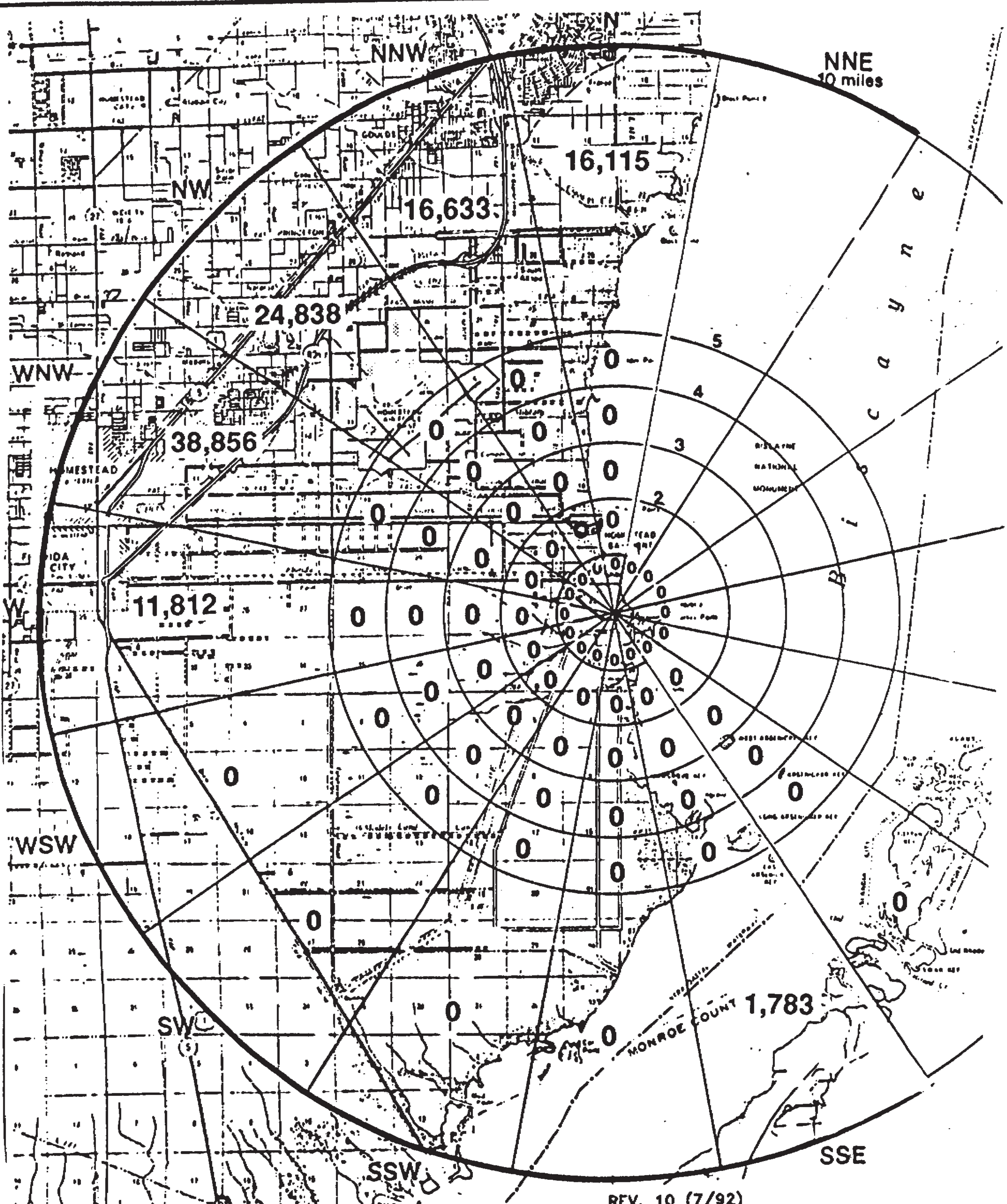
REV. 16 (10/99)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3 & 4

1997 RESIDENT POPULATION
WITHIN 10 MILES OF
TURKEY POINT PLANT

FIGURE 2.4-1

FILE: FTM00268.DWG

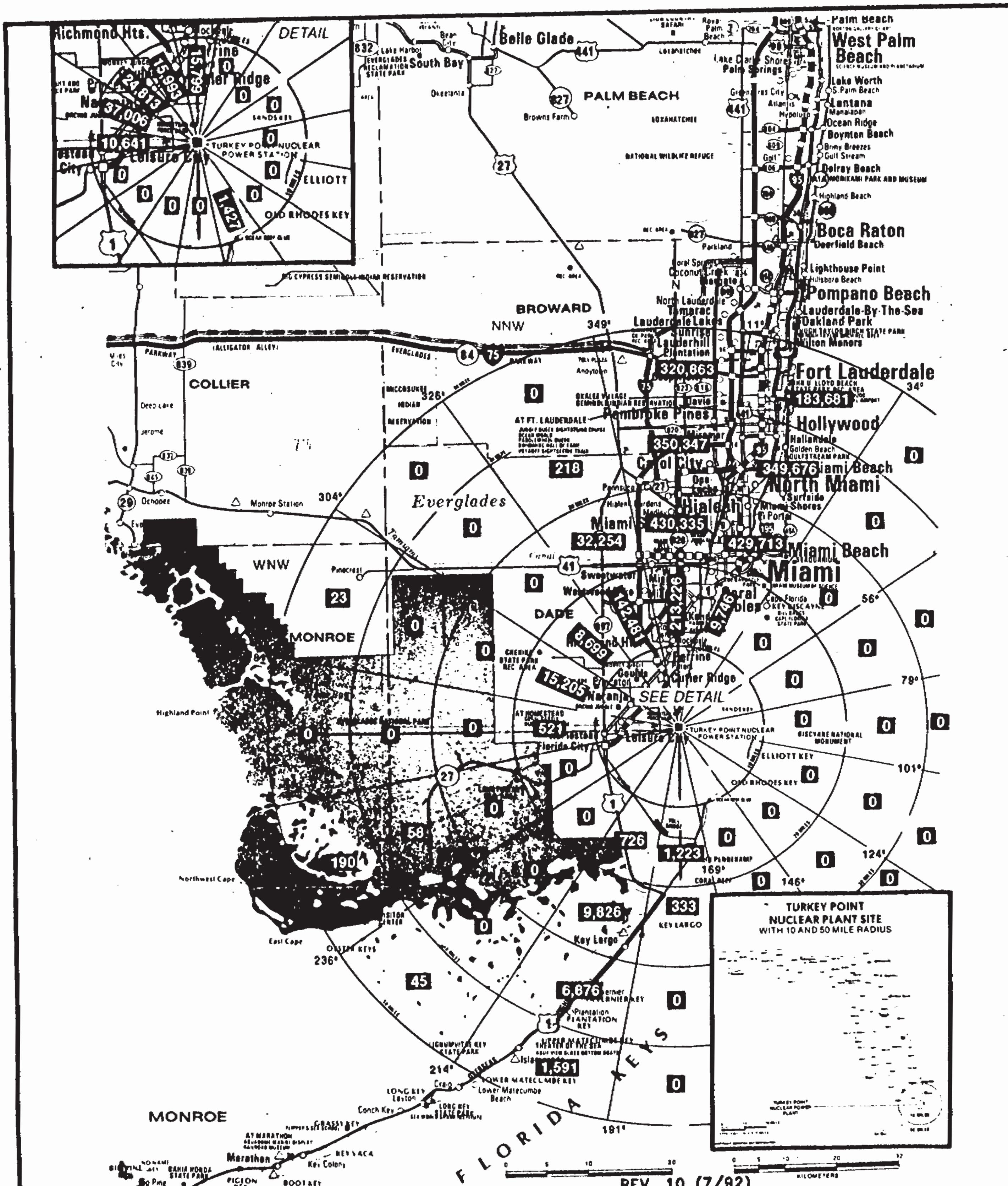


REV. 10 (7/92)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3&4

1995 PROJECTED RESIDENT POPULATION
WITHIN 10 MILES
OF TURKEY POINT PLANT

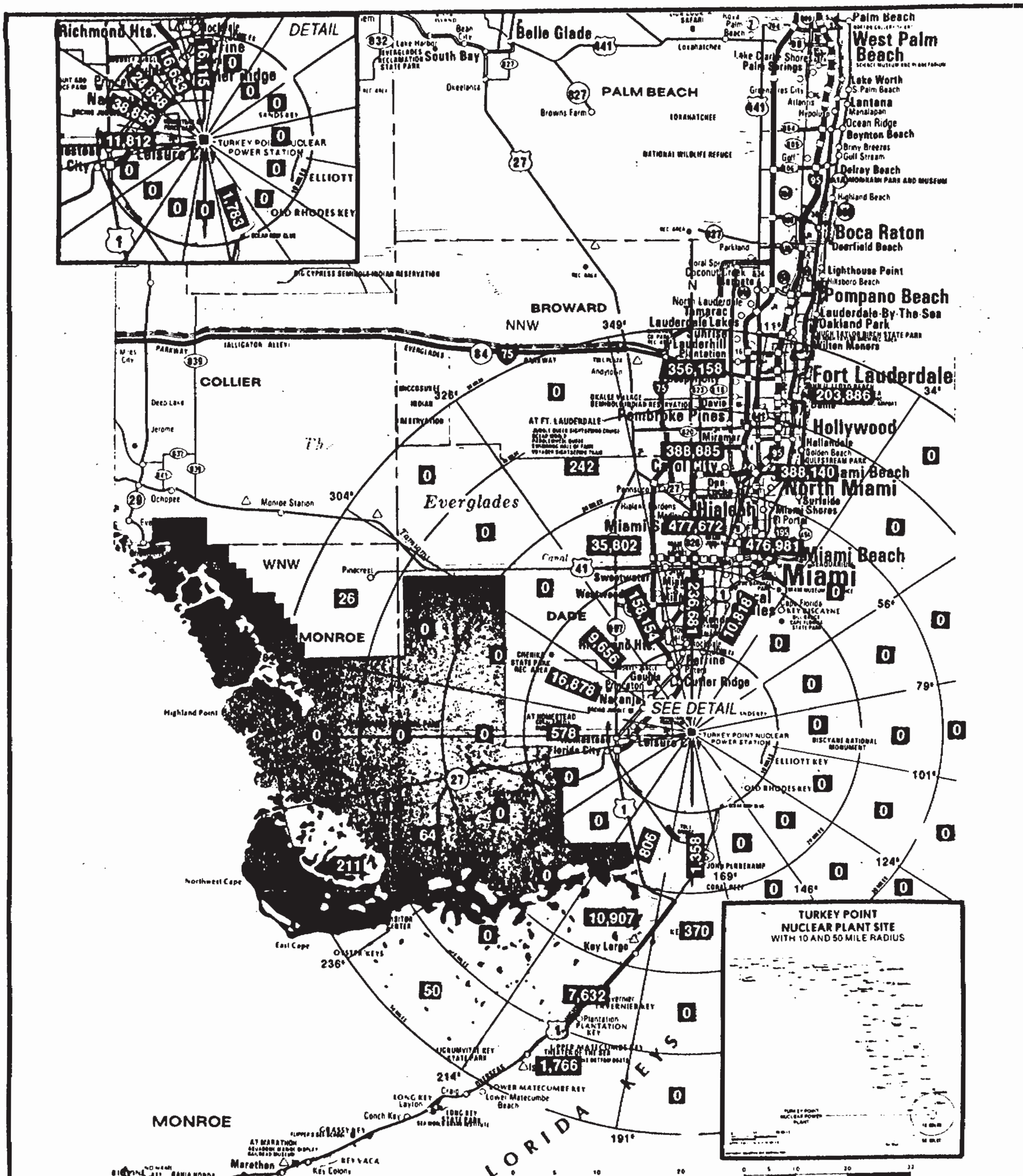
FIGURE 2.4-2



FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3&4

1990 RESIDENT POPULATION WITHIN 50 MILES OF TURKEY POINT PLANT

FIGURE 2.4-3

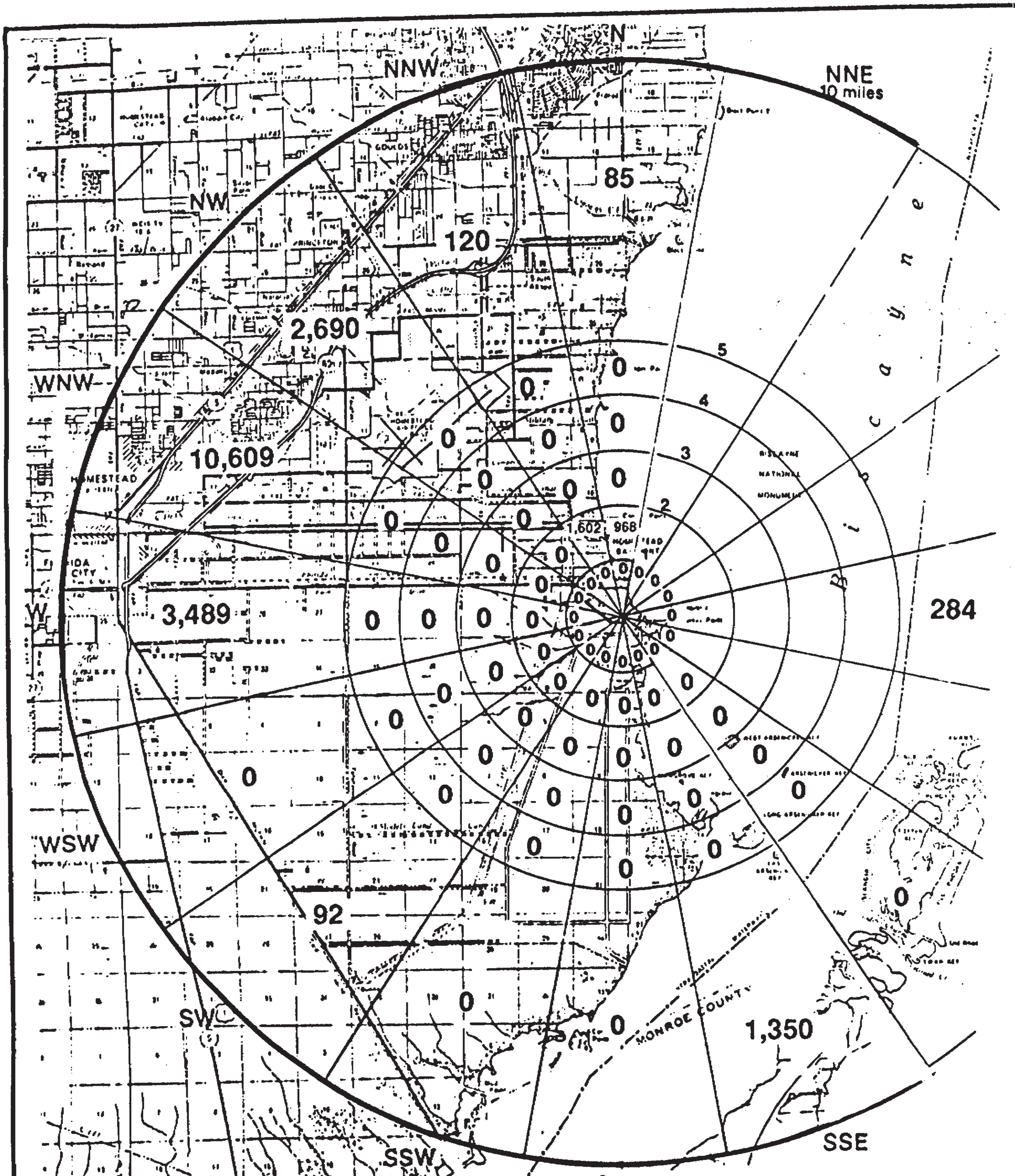


REV. 10 (7/92)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3&4

1995 PROJECTED RESIDENT POPULATION WITHIN 50 MILES OF TURKEY POINT PLANT

FIGURE 2.4-4

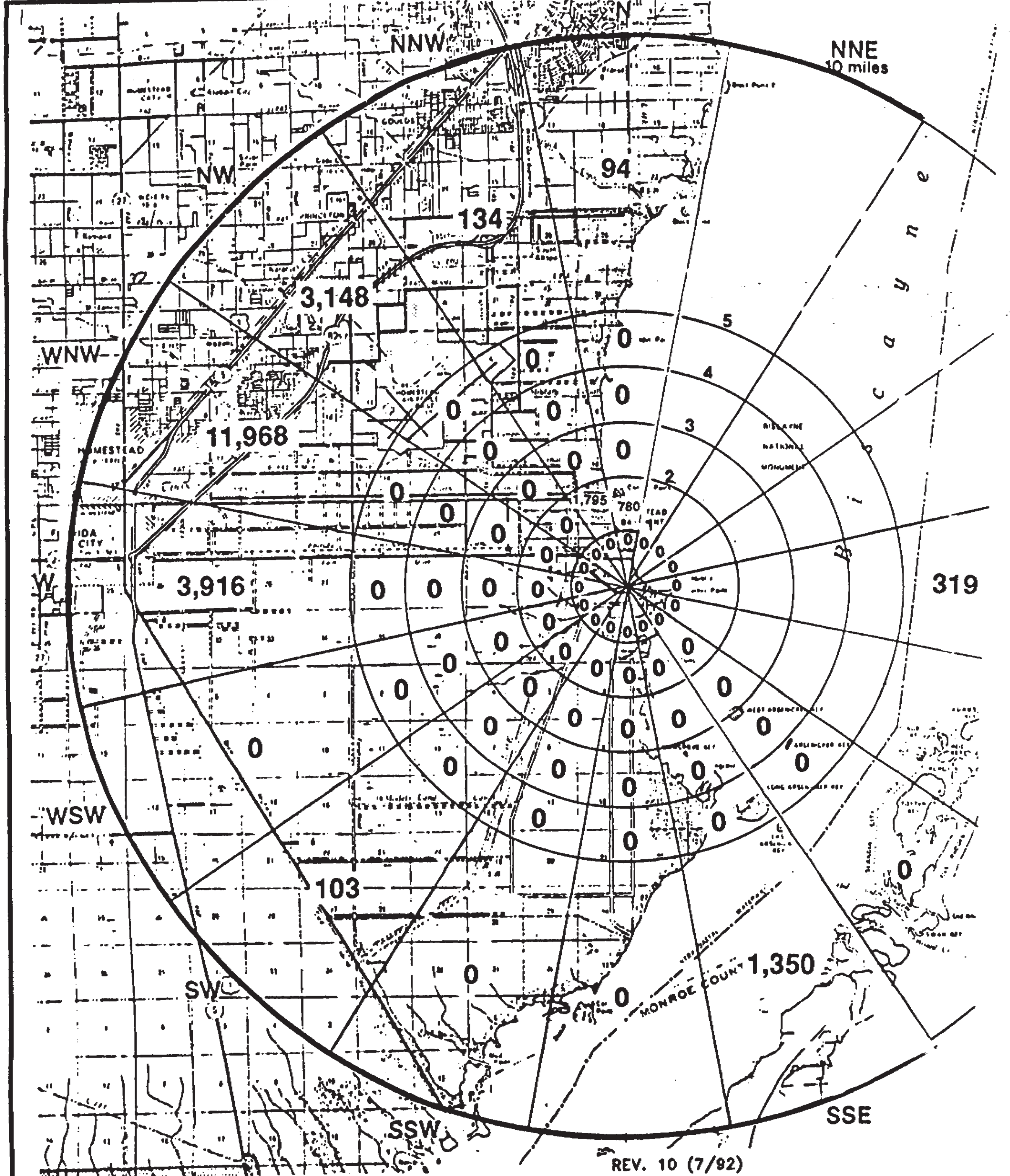


REV. 10 (7/92)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3&4

1990 PEAK SEASONAL AND DAILY VISITORS WITHIN 10 MILES OF TURKEY POINT PLANT

FIGURE 2.4-5



FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3&4

1995 PROJECTED PEAK SEASONAL AND DAILY VISITORS WITHIN 10 MILES OF TURKEY POINT PLANT

FIGURE 2.4-6

2.5 LAND USE

The information in this section pertains to studies conducted of the land use of counties adjacent to Turkey Point Units 3 and 4 around the times of construction. This information is for historical purposes only. Current land use information is contained within the Turkey Point Radiological Emergency Plan.

2.5.1 REGIONAL LAND USE

Dade County

An analysis of Dade County's economic base is presented as an introduction to the discussion of land use patterns. In spite of the continuing diversification of its economic base, Dade County's economy is dominated by tourism. It is currently estimated that Dade County is visited by a total of approximately 5 million visitors, on a year-round basis.

Since tourism involves a great number of people making varying expenditures in a variety of ways, its impact upon the economy of an area is extremely difficult to measure and analyze statistically. One of the most reliable methods is to relate total number of lodging units to the ratio of tourist expenditures per lodging unit. It is estimated that on a statewide basis, an average of $9,360 per lodging unit was expended annually by Florida tourists in 1967. Based on these factors, it can be concluded that about $1.7 billion is currently being spent by tourists in Dade County annually. As Dade County's wealth increases, and as it constructs new and improved tourist facilities and services, tourism should remain one of the major foundations of Dade County's economic structure.

As to the overall industrial growth, one of the most notable characteristics in Dade County is the continuing development of manufacturing activities. Table 2.5-1, presents a breakdown of total nonagricultural employment in the county, by type of industry. As indicated, manufacturing accounted for 15.6 percent of total nonagricultural employment in 1967.

According to the Dade County Development Department, the county is already the home of 3,233 manufacturing plants (1966 figure). It is of special significance that 1,670 of these plants have moved into the area in the past 12 years. In fact, the number of manufacturing firms has increased by 106.8 percent in 12 years from 1,563 in 1954 to 3,233 in 1966. Manufacturing employment has increased at an even greater rate during the period.

Dade County manufacturing is essentially of the light industry type. This is generally the case in young, rapidly growing areas during their early years of industrial development. Table 2.5-2, lists Dade County's manufacturing firms by 20 industrial groups as of 1954 and 1966. This table indicates the

concentration of manufacturing and light industries, such as furniture and fixtures, aluminum products, apparel, and food products.

As is also indicated in Table 2.5-1, those industrial categories which are most directly influenced by tourism such as trade and services, occupy a significant position within the overall industrial framework of Dade County. These two categories (trade and services) combined accounted for 47.9 percent of total nonagricultural employment in Dade County during 1967. The remainder of nonagricultural employment in the county is allocated to government (13.0 percent), transportation, communications and public utilities (11.1 percent), finance, insurance and real estate (6.6 percent), and contract construction (5.8 percent).

While tourism and manufacturing have enjoyed notable development in Dade County, it is significant that agriculture's contribution to the county's economy has also increased. Acreage devoted to agriculture has increased in recent years in spite of the fact that a phenomenally expanding residential and commercial consumption of land has transformed dairy farms, truck farms and avocado groves into residential subdivisions, industrial plants and shopping centers in an extremely short period of time.

The state of Florida is widely known as an agricultural state through wide publicity of its citrus industry and winter truck farming, while little recognition is given to the county's agricultural wealth. The agricultural importance of Dade County, particularly the South Dade or Homestead-Redland district, which includes over 90 percent of the grove and crop land in the county, was indicated by the agricultural census of 1964. According to the latest census, the value of farm products sold in Dade County in 1964 was $48.2 million. The most important crops are tomatoes, snap beans, potatoes, limes, avocados, mangoes, and pole beans. From 1960 through 1964, value of farm products sold in Dade County rose from $46.7 million to $48.2 million. Although the increase was slight, it acquires relevance when compared to the unrelenting expansion of the urban area at the expense of agricultural land which has characterized the county's growth.

Consideration must be given to those aspects specifically relating to the existing and projected pattern of land use in Dade County. The findings of the "Land Use Inventory and Analysis" by the Metropolitan Dade County Planning Department in 1960 are summarized in Table 2.5-3. According to the survey, Dade County's legal boundaries encompass a total area of 2,356 square miles, of which 1,373 square miles are classified as area not subject to development. The area not subject to development includes the entire western half of the county (the Everglades National Park and the Southern Florida Flood Control District), in addition to territorial waters extending three miles out into the Atlantic Ocean.

The inland portions of this area not subject to development are uninhabited and do not exhibit any man-made uses other than existing canals and surface transportation facilities. As it pertains to the coastal waters, they constitute a center of attraction for boating and fishing enthusiasts, particularly in the tourist-oriented northern sectors of the county.

Some commercial fishing also takes place in Biscayne Bay and its adjoining waters. Total commercial fish catch during 1966 in Dade County amounted to 2,193,690 pounds, with a total valuation of $914,310. Relative to the state as a whole, Dade County's fishing industry is of very little significance, as denoted by the fact that the figures quoted represent but 1.1 percent and 2.8 percent of the respective state totals. Biscayne Bay is also the navigational route of access to the Port of Miami facilities in downtown Miami. During the period October 1966 to September 1967, the port handled 2,168 vessels (both passenger and cargo). Traffic at the Port of Miami is projected to increase considerably with the deepening of the access channel and the completion of a new port at Dodge Island.

The survey of land uses by the Metropolitan Dade County Planning Department in the area subject to development (broken down as urban and non-urban) is detailed in Table 2.5-4. There are 10 land use categories indicated: residential; commercial; tourist (which includes hotels and motels); industrial; institutional; parks and recreation; transportation; vacant or undeveloped; agricultural; and water areas, such as small lakes, canals and ponds scattered throughout the total land area. Most of the categories are self-explanatory. The institutional land is utilized for all public and semi-public structural uses, such as libraries, government buildings, hospitals, etc.

The largest single land use category in the county is agricultural, which accounts for a total of approximately 60,000 acres of land. As indicated previously, an overwhelming portion of the land which is dedicated to agriculture in the county is found towards the southern portions in the Homestead-Redland district. The importance of agriculture to the overall economy of the county has also been outlined in the preceding paragraphs.

Residential is the predominant type of urban land use and, in terms of total

acreage in use, it is surpassed only by agriculture on an overall basis (urban and non-urban areas combined) In the urban and non-urban land areas combined, 48,646 acres (representing 7.8 percent of the acreage) were used for residential purposes in 1960. Housing in the Miami area traditionally followed the narrow ridge of high land which stretches along the Atlantic Ocean between Biscayne Bay and the Everglades. The post war era brought about a considerable spread of settlement, not only northward and southward along this ridge, but also westward, penetrating into the Everglades flat land. The largest housing additions were absorbed by the urban core around the City of Miami and on the ocean side north of Miami Beach. During the last ten years, suburban areas in the far northern and southern parts of the county have been subject to intensive residential development.

Industrial uses in the county, accounting for 5,051 acres in 1960, centered in the Hialeah-Miami International Airport area. Other significant concentrations of industry exist in or near the downtown Miami sector and in the northeastern sector of the city bordering the Florida East Coast Railroad tracks. There are scattered industrial concentrations along U. S. Highway 1 in the southern portions of the county. A major industrial concern (Aerojet General) has established operations in this portion of the county after completion of the 1960 survey. Including land reserved for future expansion, the entire Aerojet operation occupies 73,000 acres of land in the area immediately to the west of the Homestead-Florida City urban complex.

Commercial concentrations are most evident in or near the central core of the City of Miami. There is also an almost uninterrupted pattern of commercial strip development along U. S. Highway 1, extending from the northern county line as far south as Homestead. Although tourist land use categories account for an insignificant portion of total acreage in the county, it must be realized that this classification includes only land occupied by hotels, motels, etc. Even if the amount of land in use for public parks and recreational areas is added, the resultant amount would not be properly indicative of the true importance of tourism to the overall county's economy. A substantial portion of the residential, commercial and industrial development in the county has been motivated by the increased demand generated by a constant influx of tourists. As a general rule, the majority of the tourist-oriented facilities in the county are located on the coastal resort areas of Miami, and in the resort communities of Miami Beach, North Miami Beach and Key Biscayne.

As shown in Table 2.5-4, in the urban area of 200 square miles or 127,382 acres, 29,815 acres (23.4 percent of the total) were vacant in 1960. An additional 2,837 acres (2.2 percent of the total urban area) were being farmed. Most of the vacant and agricultural land in the urban area lies in the fringe sectors; there is very little land remaining available for development in the inner sectors of the urban area. Of the total non-urban land area of 783 square miles, 42.6 percent or 212,977 acres were vacant and undeveloped. The land is largely high pine land which does not involve expensive draining or filling. An additional 208,455 acres or 41.7 percent of the non-urban areas' undeveloped land consisted of glades and marsh land.

As the pattern of population and commercial growth in Dade County continues to expand outward from the inner cores into the unincorporated areas, it is anticipated that there will be a substantial intensification of land use in the fringe areas. An analysis of the proposed general land use master plan for Metropolitan Dade County, presenting the Planning Commission's 1985 estimate of land use distribution in the county, indicates that the pattern of development during the ensuing 20 years will not bring about any substantial changes in the existing distribution of uses in the county.

Westerly expansion anticipated to take place in residential construction will be implemented at the expense of agricultural land. In spite of this, agriculture should continue to be a leading contributor to overall economic progress in the area. Areas earmarked for future industrial development lie towards the western portions of the county. Tourist and recreational areas will prevail in the eastern coastal areas. Future commercial concentrations will be positioned near major transportation routes so as to maximize accessibility from surrounding areas.

Broward County

Broward County abuts Dade County to the north. There is much similarity in the two counties from the standpoint of their economic structures and their patterns of land use. However, Broward is dependent upon tourism as a supporting economic activity to a larger extent than Dade. It is estimated that 2.3 million tourists visited Broward County during 1967 and that these tourists spent approximately $527 million. Most of the county's tourist-oriented facilities, as is the general rule along the southeastern coast of Florida, are located towards the eastern coastal areas.

Agriculture is another significant income producing activity in Broward County. The leading crop is winter vegetables and the Pompano Beach area in the northern sector of the county has approximately 10,000 acres dedicated to this type of farming.

Prior to 1950, Broward County was almost wholly dependent upon these two income producing activities -- agriculture and tourism. Neither of these activities were able to establish a stable economic base. Since 1950, the substantial growth of population experienced by the county has, in turn, generated an increasing demand for new housing, services retail and recreational facilities. Naturally, this was accompanied by a broadening of the county's industrial base.

Table 2.5-5, contains the Florida Industrial Commission's estimates of nonagricultural employment in Broward County during 1967 and shows that nonagricultural employment totaled 125,200 in 1967. Of this total, 88.3 percent were engaged in non-manufacturing activities and 11.7 percent engaged in manufacturing activities. Broward County is experiencing gains in manufacturing employment and it is anticipated that manufacturing activities will become an even more important part of the economy of Broward County in ensuing years. Currently, the largest concentration of industry, predominantly of the light type, occurs in the vicinity of Port Everglades (just south of the City of Fort Lauderdale) and in the western portions of the county.

As is the case in Dade County, other important industrial categories, in terms of employment, are those which are most directly connected to the tourist trade. These categories are wholesale and retail trade and services, accounting for a combined total of 50.3 percent of nonagricultural employment. The remainder of the nonagricultural employment in Broward County is allocated to the following categories: government, 15.4 percent; contract construction, 10.9 percent; finance, insurance and real estate, 6.5 percent; and transportation, communications and public utilities, 5.2 percent.

<u>Monroe County</u>

Monroe County abuts Dade County to the south. Although the bulk of its territory lies in the western half of the end of the Florida peninsula, this area forms part of the Everglades National Park and is not subject to development. The majority of the county's population resides in a series of small islands -- known as the Keys -- which extend in a southwesterly arc from the eastern half of the peninsula. The Keys portion of Monroe County contains beaches and other resort attractions that have promoted extensive tourist industries. The largest city in Monroe County, Key West, is located at the end of the long strip of islands and is the site of a large submarine base upon which the economy of the county is also heavily reliant.

Although the economy of Monroe County still remains mainly tourist-oriented, it has become somewhat more diversified in recent years. The area has developed certain light industries, most important of which is the seafood packing industry, established to accommodate the superb fishing (sport and commercial) which exists on the Keys. Monroe County accounted for approximately 25 percent ($8.5 million) of the value of the entire Florida commercial fish catch in 1967. Statistics indicate that more shrimp and shellfish are landed in Monroe County than in any other county in Florida. Although the figures quoted above apply to the county as a whole, it must be remembered that almost all of the income accrues to the Keys, since almost all of the fishing boats operate from this area.

Table 2.5-6, presents a breakdown of nonagricultural employment in Monroe County as of March, 1967. As indicated, those industries which are related to tourist activities (trade and services) account for a substantial portion of total employment in this area. Government is the largest single contributor to total employment. Manufacturing occupies a very insignificant position in the overall economic structure of the county and accounts for only 3.5 percent of total nonagricultural employment.

2.5.2 LOCAL LAND USE

Figures 2.5-1 and 2.5-2 indicate the generalized existing and projected (1985) land use pattern within 5 and 10 mile radii of the subject site. This

information is based upon the results of land use studies conducted by the Metropolitan Dade County Planning Commission.

As shown in Figure 2.5-1, approximately one-half of the total area within the 0 - 5 mile radius is formed by coastal waters in Biscayne Bay. Figure 2.5-1 also indicates that a substantial proportion of the land area in the 0 - 5 mile radius is vacant. Commercial and industrial uses are entirely lacking in this area and residential uses are limited to three non-urban residential, structures. Two of these structures are located in Township 57, Range 40, Section 18, and the third one is in Township 57, Range 40, Section 7. There is a distance of 3.8 miles between the subject site and the nearest residence. (As mentioned previously, these residences are not utilized for permanent occupancy.)

The only significant type of land use in the 0 - 5 mile radius is agriculture, occupying an area of approximately 5 square miles. All of the agricultural land is located in the northwestern quarter of the 0 - 5 mile arc and is mostly used for truck crop farming. This northwestern quarter also includes a recreational area, the Homestead Bayfront Park, located approximately one mile directly to the north of the subject site, and a portion of Homestead Air Force Base. Most of the land area in the southwestern quarter of the 0 - 5 mile arc consists of glades and marsh land, and, therefore, is not suitable for agriculture or any other form of land use.

The initial survey was conducted in 1966, the findings of which were presented in conjunction with the Preliminary Safety Analysis Report. These findings were updated in June, 1968 by means of a second detailed survey of the area within the 0 - 5 mile radius and the results show no significant deviations in the pattern of land use from those of the survey two years before. The following uses exist within the 0 - 5 mile radius:

1. Deleted

2. Homestead Air Force Base transmitter and water tank installations in T-57, R-40, S-7.

3. A total of four machinery houses, one at each of the respective gauging stations in the Military Canal, Mowry Canal, North Canal, and Florida City Canal. (These canals, aligned in an east-west direction, transverse the northwestern quarter of the 0 - 5 mile arc.)
4. A total of five barns, four of which are located in T-57, R-40, S-18, and one in T-57, R-40, S-6.
5. A total of approximately 15 sheds and shacks used for storage of agricultural equipment and tools, and other miscellaneous storage purposes. These are distributed as follows: 2 in T 57, R-40, S-6; 6 in T-57, R-40, S-18; 3 in T-57, R-39, S-24; and 4 in T-57, R-40, S-7.

As it is indicated in Figure 2.5-1, the pattern of land use becomes more diverse in the 5 - 10 mile radius. Nevertheless, there is still a substantial proportion of vacant and agricultural land in this area. The Homestead Air Force Base, as shown in Figure 2.5-1, is situated just outside the 5 mile radius and occupies a land area of approximately 800 acres. Although not shown in Figure 2.5-1, there is also a Navy installation in the 5 - 10 mile radius, located approximately 7 miles southwest of the site in T-58, R-39, S-22. This installation contains no personnel and is currently being used as a motor pool.

Extensive residential development exists in the peripheral areas of the 10 mile arc. (This area encompasses most of the Homestead-Florida City urban complex.) Commercial and industrial uses are also evident in this area, particularly alongside U. S. Highway 1. To the east, the 5 - 10 mile radius also encompasses the offshore Elliott Key. Excepting approximately 60 part-time residences scattered throughout the Keys, this area remains undeveloped.

Based on the projections of the Metropolitan Dade County Planning Commission, and on the most probable future developments, it appears that the area within the 0 - 5 mile radius will not undergo any residential, commercial or industrial development during the 20 year projection period. Most certainly, the proportion of land dedicated to agriculture in this area will have increased by the end of the 20 year projection period, as suburban expansion continues to absorb good farming land in other sectors of the county.

In the 5 - 10 mile radius, it is anticipated that there will be an intensification in the expansion of residential uses, sprawling from the Homestead-Florida City complex. This will naturally come as a result of the

increases in population that will take place in the area. This residential expansion will be accompanied by additional commercial development and industrial uses; however, these uses are anticipated to remain concentrated in the same areas that they occupy at present.

The projected land use map, shown in Figure 2.5-2, reflects the potential development of the offshore keys into a residential/tourist area (the Islandia Project). There is now a plan approved by Congress to convert the key into a National Park area.

TABLE 2.5-1

Nonagricultural Employment*

Dade County, Florida

1967 Annual Average

	Number	% of Total
Total Nonagricultural Employment	409,300	100.0%
Manufacturing	63,700	15.6
Contract Construction	23,600	5.8
Transportation, Communication and Utilities,	45,400	11.1
Trade	109,900	26.8
Finance, Insurance and Real Estate	27,100	6.6
Services and Miscellaneous	86,500	21.1
Government	53,100	13.0

*Includes only establishments covered by the Unemployment Compensation Law having four or more employees.

Source: Florida Industrial Commission
First Research Corporation

Table 2.5-2

Manufacturing Firms By Industrial Group

Dade County, Florida

1954 - 1966

	Number of Firms 1954	1966	Increase 1954-1966 Absolute	Percent
Food Products	183	279	96	52.5%
Tobacco Products	0	8	8	-
Textile Products	9	35	26	288.9
Fabric Products	215	411	196	91.2
Wood Products	67	78	11	16.4
Furniture and Fixtures	169	327	158	93.5
Paper Products	17	49	32	188.2
Printing and Publishing	196	373	177	90.3
Chemical Products	63	157	94	149.2
Petroleum Products	3	17	14	466.7
Rubber Products	0	88	88	-
Leather Type Products	24	55	31	129.2
Glass, Clay and Stone Products	111	212	101	91.0
Primary Metals	10	43	33	330.0
Fabricated Metal Products	218	356	138	63.3
Machinery Products	50	157	107	214.0
Electrical Products	22	112	90	409.1
Transportation Products	40	170	130	325.0
Professional and Scientific Products	21	47	26	123.8
Miscellaneous Products	145	259	114	78.6
TOTAL	1,563	3,233	1,670	106.8%

Source: Dade County Development Department
First Research Corporation

TABLE 2.5-3

Land Use Summary

Dade County, Florida

1960

Area Not Subject to Development	Area in Square Miles
Everglades National Park	650
Central and Southern Florida Flood Control District	368
Biscayne Bay	223
Atlantic Ocean	132
Subtotal	1,373
Area Subject to Development	
Urban Area	200
Non-Urban Area	783
Subtotal	983
TOTAL AREA OF DADE COUNTY	2,356

Source: Metropolitan Dade County Planning Department

TABLE 2.5-4

Land Use Summary

Area Subject to Development

Dade County, Florida

1960

	URBAN AREA		NON-URBAN AREA		TOTAL	
	Acreage	% of Total	Acreage	% of Total	Acreage	% of Total
Residential	44,248	34.8%	4,398	0.9%	48,646	7.8%
Commercial	4,398	3.5	428	0.1	4,826	0.8
Tourist	870	0.6	33	-	903	0.1
Industry	2,575	2.0	2,476	0.5	5,051	0.8
Institutional	3,835	3.1	918	0.2	4,753	0.8
Parks and Recreation	4,796	3.8	354	0.1	5,150	0.8
Transportation	31,516	24.6	10,714	2.1	42,230	6.7
Agriculture	2,837	2.2	57,453	11.5	60,290	9.6
Undeveloped						
Vacant	29,815	23.4	212,977	42.6	242,792	38.7
Glades and Marsh	98	0.1	208,455	41.7	208,553	33.3
Water	2,394	1.9	1,656	0.3	4,050	0.6
TOTAL	127,382	100.0%	499,862	100.0%	627,244	100.0%

Source: Metropolitan Dade County Planning Department

TABLE 2.5-5

Nonagricultural Employment*

Broward County, Florida

1967 Annual Average

	Number	% of Total
Total Nonagricultural Employment	125,200	100.0%
Manufacturing	14,700	11.7
Contract Construction	13,600	10.9
Transportation, Communication and Public Utilities	6,500	5.2
Trade	36,800	29.4
Finance, Insurance and Real Estate	8,200	6.5
Services and Miscellaneous	26,100	20.9
Government	19,300	15.4

*Includes only establishments covered by the Unemployment Compensation Law having four or more employees.

Source: Florida Industrial Commission
First Research Corporation

TABLE 2.5-6

Nonagricultural Employment*

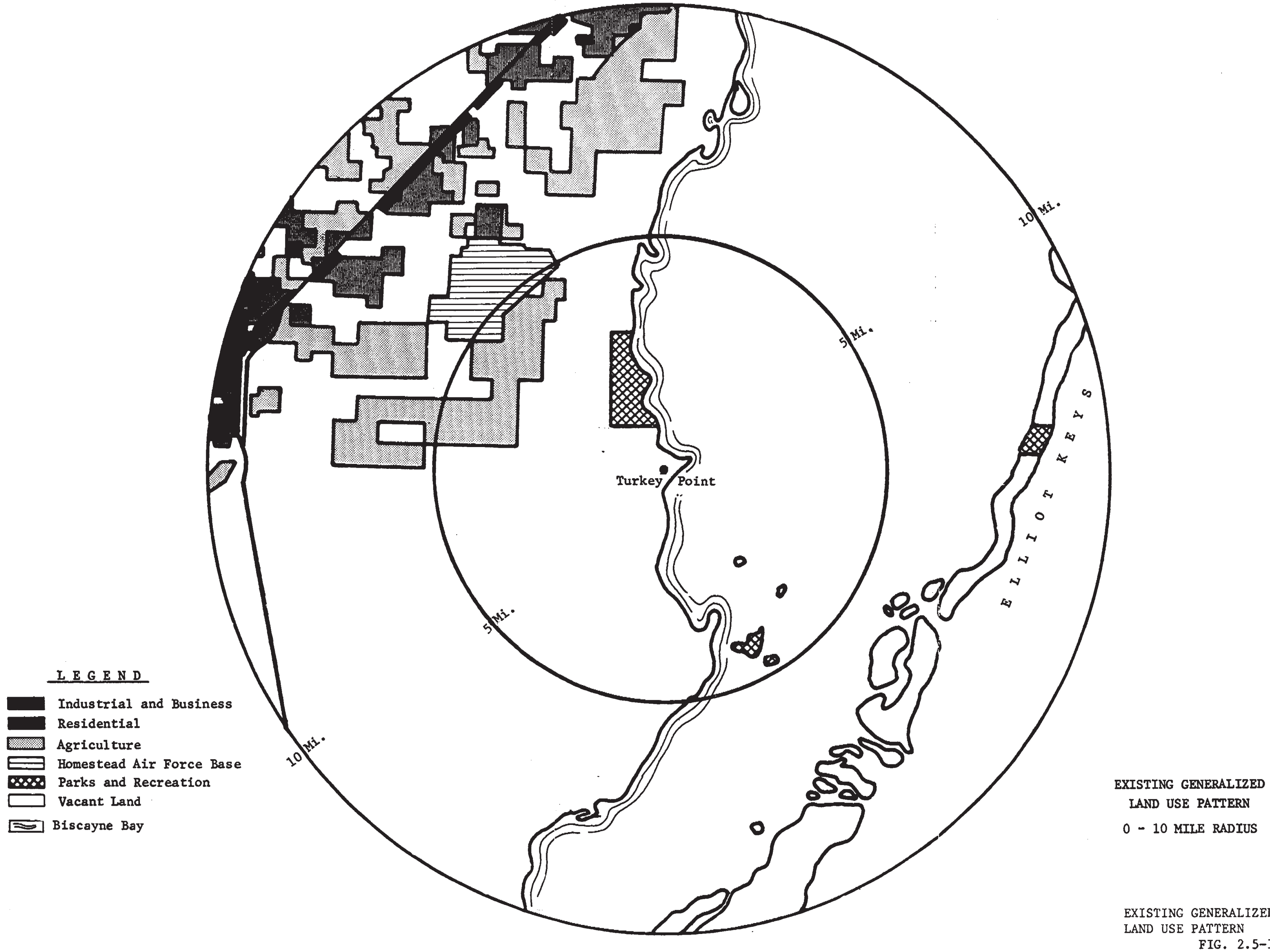
Monroe County, Florida

March 1967

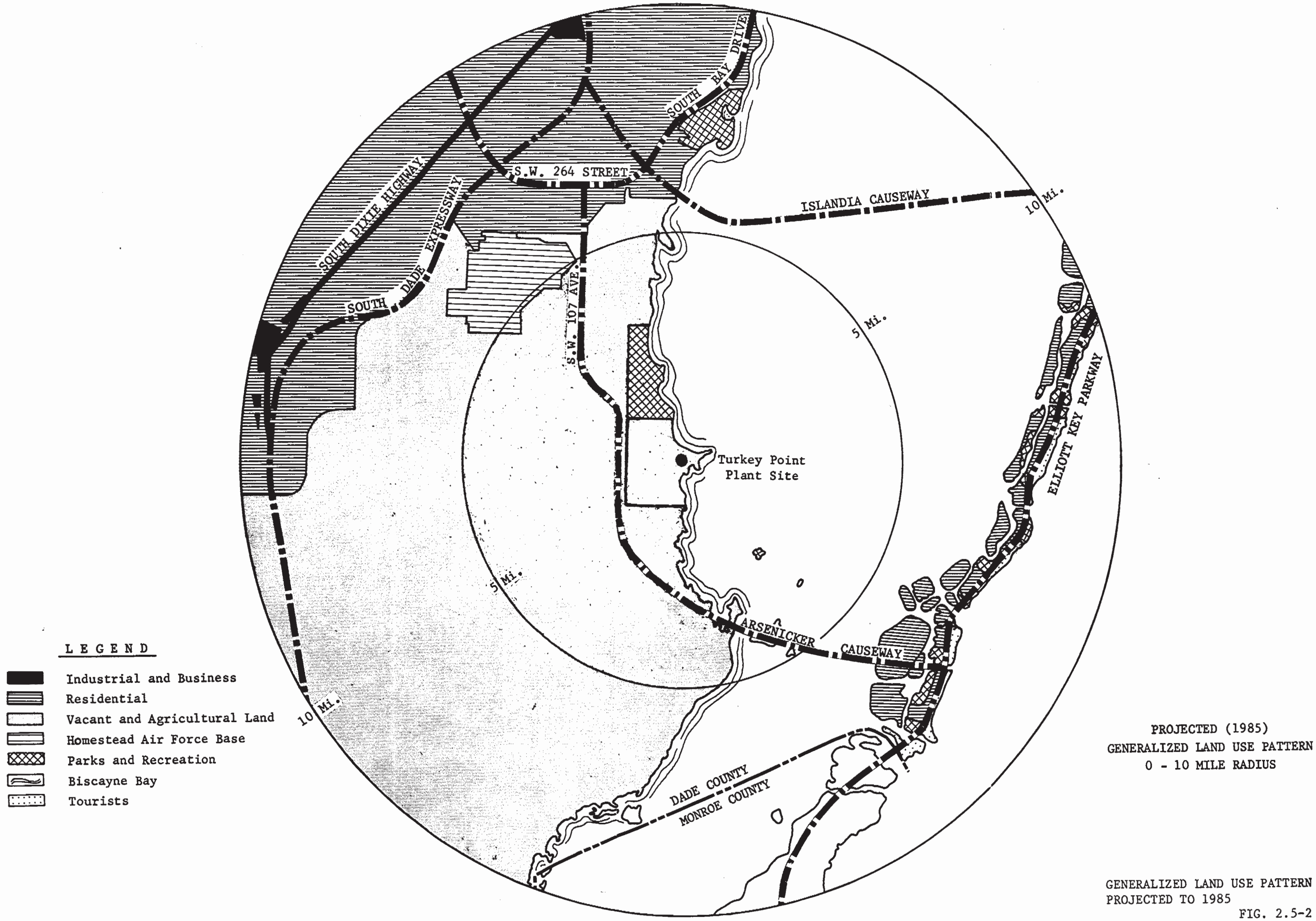
	Number	% of Total
Total Nonagricultural Employment	12,440	100.0%
Manufacturing	440	3.5
Contract Construction	660	5.3
Transportation, Communication and Public Utilities	640	5.2
Trade	3,240	26.0
Finance, Insurance and Real Estate	460	3.7
Services and Miscellaneous	2,900	23.3
Government	4,100	33.0

*Includes only establishments covered by the Unemployment Compensation Law having four or more employees.

Source: Florida Industrial Commission
First Research Corporation



EXISTING GENERALIZED
LAND USE PATTERN
FIG. 2.5-1



GENERALIZED LAND USE PATTERN
PROJECTED TO 1985
FIG. 2.5-2

2.6 METEOROLOGY

The information in this section pertains to climatological features derived from weather records available at the time Turkey Point Units 3 and 4 were constructed. This information is for historical purposes only.

2.6.1 GENERAL CLIMATOLOGY

The general climatological features of the site area were obtained from weather records from Miami International Airport 25 miles N, Miami Beach 26 miles NNE, Homestead Air Force Base 5 miles NW and Homestead Experiment Station 12 miles WNW and others.[(1)] The climate is subtropical with long warm summers accompanied by abundant rainfall and mild dry winters. The year has been divided into two seasons, the "wet" (May-Oct.) and the "dry" (Nov. -April). Marine influences predominate including land-sea breeze and other coastal effects. There are also night time and early morning inversions and important local differences between stations. East and southeast winds predominate during most of the year, but north and northwest winds become important at night and during the winter. Frontal activity and cold air masses penetrate the area in winter but are quickly moderated. Tropical storms visit the area about once every two-years and hurricane winds are felt once every seven years.

The variation in climate as one progresses inland from the coast line can be

seen in Table 2.6-1. The daily maximum air temperatures in this area are warmer than the ocean in all months, except at Miami Beach in the summer. Sea breezes temper the daily range of temperatures to 8-10 degrees at the beach but 10 miles inland the range is 20-25 degrees. The annual number of days with temperatures of 90 degrees F or greater is 14 at Miami Beach and 96 at Homestead Experiment Station. These statistics show the sharp reduction in maritime influence inland. The monthly temperature data show a single maximum in August with peak of 91 F at HMST. Humidities at Miami Airport at 7:00 A.M. Eastern Standard Time vary from 80-88 per cent,

(1) Letter L-78-171, "Meteorological Facility", dated May 15, 1978 from R. E. Uhrig of Florida Power and Light to A. Schwencer of USNRC Branch No. 1, describes the use of the South Dade Plant facility, located approximately 8 miles southwest of the Turkey Point site.

and at 1:00 P.M., vary from 56-66 per cent. Higher humidities than these can be expected at Turkey Point during the day. Fogs in this part of the state occur during the night and very early morning hours in the order of a dozen times a year and dissipate soon after sunrise. The mean cloud cover, including high thin types at Miami Airport is 5.7 tenths. Most of the rain is derived from showers of short duration. Some of the showers are quite heavy with thunderstorms occurring 77 times per year at Miami Airport. Yearly precipitation varies from 46 inches at Miami Beach to 63 inches at Homestead Experiment Station 10 miles inland, with monthly maximums in June and September.

2.6.2 SURFACE WINDS

Five years of hourly surface wind observations, 1960-1964 inclusive, at Homestead Air Force Base and Miami Airport have been analyzed to provide the

general characteristics of surface winds in the area. These "mean hourly" observations in Table 2.6-1, represent 1-minute sample periods approximately on the hour and as such do not reflect higher or lower speeds or shifts in directions that may have occurred at other times during the hour. The average of these observations should compare favorably with the average of the mean
speeds taken over the whole hour.

Wind Roses

Figures 2.6-1 and 2.6-2 present wind direction roses for Homestead Air Force

Base and Miami Airport for: all weather conditions (rain or sunshine), all hours, all seasons; the daytime (7AM-6PM) rainy season (May-Oct.); the nighttime (7PM-6AM) rainy season; the daytime (7AM-6PM) dry season (Nov.-Apr.); and the nighttime (7PM-6AM) dry season. Figures 2.6-3 and 2.6-4 present wind direction roses for the above two stations in the same manner, except that they were compiled only from observations made when rain was falling at the stations. Wind directions NE through the eastern quadrants and around to and including SSW are considered onshore. Miami Beach is included as an onshore location.

The primary difference between the two stations is the greater percentage of

calms at Homestead Air Force Base. The Miami Airport wind equipment is located 20 ft. above ground and is the 3-cup type, U.S. Weather Bureau model F 420C. Aerovane type equipment is installed 13 ft. above ground at Homestead Air Force Base. Although there may be slight differences in maintenance procedures, the starting speeds and performance characteristics of these sensors are considered to be essentially the same, within practical tolerances. The exposures are also similar. The difference in the number of observed calms, therefore, is indicative of small-scale differences in wind regime close to the coast. The easterly wind directions definitely predominate with a secondary maximum in the N to NW produced by some cold air invasions from the north during the winter. The northerly components in summer are probably the results of land-breeze influences. There is a tendency for winds to become more northeasterly at both stations during rainfall in winter. The maximum scatter of wind direction occurs during daytime summer rains.

Wind Direction Persistence Frequencies

Frequency of wind direction persistence by direction and the persistence of calms for Homestead Air Force Base and Miami Airport stations are presented in Figures 2.6-5 and 2.6-6. These illustrations show the number of occurrences in the 5-year period when the wind was continuously reported from one direction for 6-10, 11-20, 21-30, or more than 30 consecutive hourly observations and also when calms persisted on the same basis. Persistence for less than 6 hours is not considered important for this application. Except for calms at Homestead Air Force Base, easterly winds are most persistent in all duration categories at both stations.

Wind Speed and Direction Frequencies

Figures 2.6-7 and 2.6-8 present frequency of wind speeds by direction for Homestead Air Force Base and Miami Airport, showing the number of occurrences (hourly observations) of wind speed categories (calms, 1-3, 4-7, 8-14, 15-39 and over 40 mph) for each of the 16 compass directions. All wind speeds are most frequent from easterly directions at both stations which is to be expected for locations predominantly in the trade wind region.

2.6.3 RAINFALL

The region immediately inland and slightly northwest from Turkey Point has one of the highest annual rainfalls of any region in Florida, Figure 2.6-9. Rainfall in this part of the state is closely related to interactions of the prevailing sea breezes with the general wind system, and to character of the soil, coast shape, distance inland, and other factors. During morning hours, more rainfall occurs at the beach than inland and the reverse is true during the afternoons. Measurable rainfalls occur on about 125 days per year. The three greatest 24-hour rainfall totals shown in Table 2.6-1 occurred at the station farthest inland, Homestead Experiment Station, during September, October and November. The highest totals at Miami Beach are in the order of 6.5-8 inches during the months of April, June, September and November.

At least half of the 24-hour rainfall totals exceeding 7 inches at Miami Airport are produced by tropical storms. Based on a limited data sample, the Turkey Point site can expect the following rates every two years: 2.6 in. in 1 hr, 4.0 in. in 6 hr, and 5.3 in. in 24 hr. Every hundred years, 6 in. can be expected to fall in 1 hr, 8 in. in 6 hr, and 13 in. in 24 hr. Miami has experienced 5-minute rains on the order of 1 in., 10-minute rains of 2 in., and 30-minute rains of about 3 in.

2.6.4 ATMOSPHERIC PARAMETERS ALOFT

Low Level Lapse Rates of Temperature

General

Temperature lapse ($\gamma = \sigma T/\sigma Z$) in the layer from the surface to 950 mb (about 1930 ft. MSL at Miami) has been analyzed for the year 1964 as an indication of the thermodynamic stability of that portion of the atmosphere which is felt to be most important for low-level diffusion. Monthly tabulations of this parameter using all soundings at 7 AM are shown in Figure 2.6-10, and 7 PM in Figure 2.6-11. These figures are stratified according to six categories.

The definitions of each lapse rate category are given in the legends of the figures. The low level atmosphere is generally unstable at Miami, but with marked differences at 7 AM versus 7 PM. For the year 1964, this layer was unstable 55 per cent and stable 31 per cent of the time at 7 AM, whereas at 7 PM the percentages were 93 and 4 respectively. Marine influences would tend to reduce the variability of these conditions at Turkey Point.

Temperature Inversions

During the 5-year period, 1960-1964, 67 per cent of the morning (7 AM) and 14 per cent of the evening (7 PM) soundings at Miami Airport contained at least one inversion based under 2000 ft., occurring mostly with offshore winds in the morning, and with onshore winds at night. As used here, "offshore" winds are those in which both the surface winds and winds up to the 1000 mb height are offshore, and "onshore", when both surface and upper winds are onshore. "Mixed" winds are in those conditions when the surface and upper winds are in different directions. Of the inversions that were based under 2000 ft., 89 per cent of the morning and 49 per cent of the evening inversions were based under 100 ft. Combining these, it is found that 82 per cent of inversions that would have the greatest effect on diffusion and dispersion would be based in the lowest 100 ft., probably at the ground. Table 2.6-2 shows that more than 80 per cent of the inversions based less than 100 ft. at Miami Airport would be topped at about 700 ft.

An indication of the strength of the inversions based below 100 ft. is presented in Table 2.6-3. Shallow inversions are generally accompanied by more negative lapse rates than deep ones. Except for 7 PM soundings in the wet season, they tend to be stronger with offshore winds. Morning inversions (7 AM) are generally stronger than evening inversions (7 PM).

Table 2.6-4 summarizes the mean increases in surface temperatures (Ā) needed to replace the tabulated inversions with dry adiabatic lapse rates (thoroughly mixed air). Thicker inversions, those occurring with offshore winds, and those at 7 AM require greater temperature increases. Temperature increases in the order of 2-7 degrees are generally sufficient in most cases. As would be expected, temperature increases required on days with 7 AM inversions based below 100 ft. are much greater than on days when there are no 7 AM inversions under 2000 ft.

A comparison between actual hourly surface temperature observations and computed values of (Ā), shows, by the tabulation following, that good mixing conditions are reached in most cases by 9 AM.

CUMULATIVE PER CENT FREQUENCY OF THE 7-AM INVERSIONS
BASED 0-100 FT. THAT ARE REPLACED BY AN ADIABATIC LAPSE
AT VARIOUS HOURS OF THE DAY
MIAMI AIRPORT, 1960-64 INCLUSIVE

Eastern Standard	Dry On	Dry Off	Dry Mix	Wet On	Wet Off	Wet Mix
8-AM	33.3	8.9	11.1	65.9	42.6	60.2
9-AM	80.4	44.7	69.4	85.8	84.4	90.0
10-AM	94.2	77.6	88.8	92.0	97.1	95.0
11-AM	95.5	92.2	98.1	95.4	98.3	98.1
12-Noon	96.8	96.7	99.0	96.5	99.1	98.7
1-PM	97.4	97.5	100.0	98.8		
2-PM		97.9				99.3
3-PM					99.5	
4-PM					100.0	
	4*	5*	0*	2*	0*	1*

* Number of times that an inversion was not replaced by an Adiabatic lapse during the period (8-AM to 4-PM)

There were only 12 times (9 in the dry season) in the 5-year period that this did not occur at all during the day. Even though smaller temperature increases would be required, it takes longer to achieve the same temperature increase at a maritime location than at one inland.

Wind Shear

Vertical shear of the horizontal wind is also important in regard to dispersion of airborne matter. Positive shear (wind speeds increasing with height) is generally observed not only with inversions, but on all days at Miami Airport, as shown in Table 2.6-5.

For inversions based below 100 ft., the shear is more positive at 7 AM than at 7 PM and with onshore rather than offshore winds. Typical shears are in the order of 2-5 knots. These shears are probably due to frictional effects and
therefore, less shear along the coast at Turkey Point with onshore winds would be expected. However, limited observations indicate pronounced positive shear there as well.

2.6.5 ON SITE METEOROLOGICAL PROGRAM

The results of the on site meteorological program are set forth in Appendix 2A.

2.6.6 SEVERE WEATHER

Hurricanes

Of 21 hurricanes in the Miami to Key West area in the 57 years ending in 1960, 10 produced hurricane winds over the immediate Miami and Turkey Point area. In the years 1960-1968, four intense tropical cyclones affected the site, two of them, Donna 1960 and Betsy 1965, were officially classified as "major storms". The Turkey Point site is in an area which has a high probability of being affected by gale force winds (41 to 74 mph inclusive) in any given year and of experiencing sustained hurricane force winds (greater than 74 mph) about once in 7 years.

Figure 2.6-12 illustrates paths of tropical storms affecting Florida from 1886 through 1964. A few hurricanes affect the area while moving toward the north, but the two more prevalent paths taken by hurricanes in this area are toward the northeast and toward the northwest. One-third of the hurricanes affecting the area occur in October on a path toward the northeast; approximately one-fifth occur in late August; and slightly less than one-third occur in the month of September. Most all of the latter move toward the northwest at an average speed of 13 mph, and have a higher potential for producing damage than the October storms on northeast tracks.

Hurricane Rainfall

Total hurricane rainfalls in the area have ranged from less than one to about 35 in. for a small 10 sq. mi area, with normal hurricane rainfall over a 10,000 sq. mi. area of 6 to 10 inches. Storms have produced 6 inches in 75 minutes and 13 inches in 24 hours in the Homestead area. In general, 30 to 60 per cent of a given hurricane's rain falls in the first 6 hours, over 90 per cent will fall in the first 24 hours, and well over 95 per cent of the total hurricane rainfall can be expected to occur within 48 hours. A maximum storm rainfall in excess of 22 inches can be expected from a hurricane each 75 to 100 years; 15 to 20 inches once every 25 to 50 years; 10 to 15 inches each 8 to 10 years; and 6 to 10 inches every 4 to 8 years. However, it should be noted that various experts estimate that only about half of the rain is caught in the standard gage in areas of high winds; conversely, rainfall experienced in areas subject to high wind is about one-half of the typical hurricane precipitation.

Hurricane Tides

Normal tidal range for the area is about 2 ft. Records of yearly extreme water levels near the site since 1946 are shown plotted in Figure 2.6-13.

These records were taken from a U.S. Coast and Geodetic Survey gauging station installed in 1946 in the North Canal, 800 ft. upstream of its mouth, and about 2 miles north of the site. No record data are available of hurricane flood tides in the area prior to 1946.

The highest level shown on the chart is 9.82 ft. above Mean Sea Level, occurring during hurricane Betsy in September 1965. During the same storm a level of 10.1 ft. was recorded at a gauging station recently installed in the Florida City Canal about one and one-half miles NW of the site.

Recorded hurricane flood tide levels of any consequence at other locations in the area are as follows:

South Miami Beach-ocean	Sept 1945	3.2 Ft MSL
Dinner Key-Coconut Grove	" "	9.8 " "
South Miami Beach-ocean	Sept 1960	3.6 Ft MSL
Dinner Key-Coconut Grove	" "	4.8 " "

Observations by various agencies (not taken from gauging station records) for other storm tides are as follows:

South Miami Beach-ocean	Sept 1926	10.2 Ft MSL	US Corps of Engrs.
Miami-Biscayne Bay	" "	10.9 " "	US Weather Bureau
Biscayne Bay mainland near S.W. 26th Road	Sept 1926	10.4 Ft MSL	US Weather Bureau
Dinner Key-Coconut Grove	" "	13.2 " "	US Corps of Engrs.
Allapattah Road near Goulds	Sept-Oct 1929	8.8-10.2 "	US Corps of Engrs.
Miami at River mouth	Oct-Nov 1935	6.7 Ft MSL	US Corps of Engrs.
Dinner Key-Coconut Grove	" " "	8.3 " "	" " " "
North Miami Beach-ocean	Sept 1945	4.3 Ft MSL	US Corps of Engrs.
Cutler (about 12 mi N of site)	" "	13.2 " "	" " " "
Cutler Road near Peters	Sept 1960	6.9 Ft MSL	US Corps of Engrs.
Homestead Air Force Base	" "	7.3 " "	" " " "

Hurricane Winds

Most hurricanes have their strongest winds in the right front quadrant. Wind speeds over land are about 70 per cent of those over water; and, regardless of location, gusts are 30 to 50 per cent greater than the 1-minute average or "sustained" wind speeds. Late season storms coming from the SW may put the Turkey Point area in the right front quadrants, but with a slight reduction in maximum winds compared to earlier storms due to the generally lower intensity of these storms, as well as longer overland trajectory. Most early season hurricanes approach from the SE, with centers generally passing to the north and east of the Turkey Point site. This places the site to the left side of the storm which is an area of lower than maximum winds.

The September 1945 storm produced sustained winds of 137 mph at Carysfort Reef Light, at the left side of the center and conservatively estimated at 150 mph at both the Homestead Army Air Base and the Richmond Navy Blimp Base which was destroyed by fire during the storm. Measured winds at Homestead Air Force Base reached 89 mph in gusts from the SE in Donna in 1960. Cleo in 1964 passed closer to the Base but produced lighter winds because of its smaller radius of maximum winds. Winds of 140 mph were estimated at Homestead Air Force Base and 160 mph winds were estimated both at north Key Largo and at Flamingo in Betsy 1965, which passed just south of the site. Gale force winds lasted 36 to 40 hours over the Miami area with gusts of hurricane velocity from 5 to 12 hours, the longer times being experienced in the Homestead area.

Although sustained hurricane winds can be expected at the site once every 6 to 7 years, sustained winds greater than gale force and peak gusts of hurricane intensity should be expected about twice as often. More explicitly, gusts exceeding 150 mph could be expected at the site in about 25 to 50 years with sustained winds exceeding 100 mph; sustained winds exceeding hurricane force but less than 100 mph (with 50 per cent higher gusts) can be expected every seven years; and sustained winds exceeding gale force with gusts to about hurricane force should be expected about every three years.

Higher winds have been estimated; but Dunn and Miller indicate that of the many actual wind measurements, the highest velocity ever measured was 175 mph at Chetumal, Mexico in Sept. 1955. Winds over the open water and at levels above the surface frictional layer might be somewhat higher. The highest ever recorded by ESSA's Research Flight Facility in its many hundreds of hurricane flying hours for the National Hurricane Research Laboratory was 200 mph for a few seconds in hurricane Inez 1966. Such measurements are not quite compatible with "sustained", "fastest mile", or "one minute" winds measured by other types of instruments at the surface; but they help to indicate that a design factor for maximum winds of 225 mph would be very conservative.

Pressure differentials due to wind or hurricane pressure gradients should not exceed 1/2" hg (.25 lb in^{-2}) in 5 minutes or about 3 times that in 20 minutes according to Dunn and Miller (Reference 1). These are far less than those for tornadoes.

Hurricane Wave Run Up Protection

External flood protection is described in Appendix 5G.

Tornadoes and Lightning

Many well developed hurricanes have tornadoes associated with them at some time during their histories. These normally occur in an area of less-than-hurricane force winds, well in advance and in the forward semi-circle of the storm center. Although no wind speed observations exist for such storms over South Florida, hurricane associated tornadoes are thought to have peak wind speeds of about one-half or two-thirds of these and are somewhat weaker in general than tornadoes that are not associated with hurricanes. Such tornadoes may occur at any time of the day, and most probably the statistics do not reflect all of those which have occurred in a given area.

Lightning is observed in many hurricanes in the form of both cloud-to-cloud and cloud-to-ground discharges at considerable distances ahead of the hurricane eye, and primarily as cloud-to-cloud discharges near the eye wall. The observation of lightning is inversely proportional to storm intensity.

Tornadoes, Waterspouts and Hail

While tornadoes do occur in South Florida, it is now established quite conclusively that they are not so violent nor as destructive as those in either northern Florida or in the Midwest. Various authorities have computed or estimated tornado wind speeds in the more intense midwest type of storm at from 100-500 mph. An experimental Weather Bureau doppler radar measured a maximum speed of 205 mph in 1958 in an "intense" Texas tornado (Reference 2). Minimum surface pressures have been measured more often than winds in tornadoes. In the "Great" St. Louis storm of 1896 the pressure drop was 2.42 inches of mercury or 1.2 psi (Reference 3). Although greater pressure drops have been observed, they occurred over longer time periods. In view of the general agreement between authorities on the smaller damage potential of such storms in the South Florida area, maximum design wind speeds of 225 mph and minimum pressures of 1.5 psi would appear very conservative.

In a recent survey by Gerrish (Reference 4), it was found that at least 56 tornadoes and 218 waterspouts were observed within 75 miles of Miami during the period 1957-1966. In addition there were 315 funnels that did not reach the surface. Tornadoes occur mostly in the afternoon whereas waterspouts occur near sunrise in the wet season. Waterspouts, while less violent than tornadoes, do occur reasonably often and occasionally come inland but soon dissipate upon reaching land. NASA (Reference 5) discovered in 1968 that spouts in the Florida Keys can rotate clockwise as well as counterclockwise. Although the evidence is not conclusive at this time, there is a tendency for tornadoes to be most active near the coast where the sea breeze could contribute momentum and waterspouts to be over shallow water to the lee of land heat sources. Even so, Dade County has an average annual damage potential of less than one square mile. This is due not only to the relatively weak intensity of these events in this area, but to the stringent South Florida Building Codes. It is estimated that the chance of sustaining damage to structures designed to South Florida Building Code in a given year is about one in five thousand.

Hail is also primarily a wet season phenomenon, occurring principally in May with an active period in April also. It occurs mostly in the afternoon and only rarely at night. Hail occurs in the Miami area about three times per year, generally in the late afternoon if in the dry season, and early afternoon in the wet season.

REFERENCES, Section 2.6

1. Dunn, G. E. and B. I. Miller, 2nd Edition 1964, Atlantic Hurricanes, Louisiana State.

2. Holmes, D. W. and R. L. Smith, 1958, "Doppler Radar for Weather Investigations", Proc. 7th Weather Radar Conf., A.M.S., Boston, pp F29-F36.

3. Woldord, L. V., 1960, Tornado Occurrences in the U.S., U.S.W.B. Dept. Commerce Tech. Paper #20, Washington, D.C., p 3.

4. Gerrish, H. P., 1967, "Tornadoes and Waterspouts in the South Florida Area", Proc. 1967 Army Conf. on Tropical Meteor., Coral Gables, Florida, 8-9 June, pp 62-76.

5. NASA, 1968, Personal Communication from V. J. Rossow.

TABLE 2.6-1

CLIMATOLOGICAL DATA

TEMPERATURE - °F				PRECIPITATION		MEAN NUMBER OF DAYS				WIND**		RELATIVE HUMIDITY				SKY**	
OCEAN TEMP.	DAILY MAX.	DAILY MIN.	MONTH-LY	MEAN	GREATEST DAILY	TEMP-MORE THAN 90°F	TEMP-LESS THAN 32°F	PRECIP-0.01 IN. OR MORE	THUNDER STORMS	MEAN HRLY. SPEED(mph)	DIREC-TION	1:00 AM EST	7:00 AM EST	1:00 PM EST	7:00 PM EST	MEAN SKY COVER - %	
71.9	74.2	63.9	69.1	1.68	3.07	0	0	7		11.7						46	MB (JAN)
	74.1	57.2	65.8	2.4	4.48#	0	0	6									HAFB
	75.8	57.9	66.9	2.03	2.50	0	0	6	1	9.2	NNW	83	86	56	74	50	MAP
	78.0	54.3	66.2	1.80	2.44	0	1										HSTD
72.7	74.9	64.2	69.6	1.65	2.65	0	0	6		11.8						43	MB (FEB)
	77.0	59.5	68.4	1.7	2.28#	0	0	4									HAFB
	77.0	58.8	67.9	1.87	2.06	0	0	6	1	9.8	ESE	83	86	57	71	51	MAP
	79.2	54.5	66.8	1.76	2.33	*	*										HSTD
75.2	76.7	66.5	71.6	1.95	2.89	*	0	6		13.0						45	MB (MAR)
	78.7	63.4	71.2	2.5	7.38#	0	0	7									HAFB
	79.8	61.1	70.5	2.27	7.07	*	0	5	2	10.1	SE	81	83	56	69	51	MAP
	81.8	57.1	69.5	2.24	4.40	1	*										HSTD
77.6	79.5	70.2	74.9	2.92	6.91	*	0	7		13.4						48	MB (APR)
	82.1	67.8	75.1	1.0	2.86#	1	0	4									HAFB
	82.6	65.8	74.2	3.88	5.18	1	0	6	3	10.5	ESE	80	80	56	69	55	MAP
	84.6	61.2	72.9	3.62	6.38	4	0										HSTD
82.4	82.4	74.0	78.2	4.54	5.90	1	0	10		12.1						50	MB (MAY)
	84.1	70.7	77.4	6.5	6.15#	1	0	10									HAFB
	85.4	69.7	77.6	6.44	8.42	3	0	10	7	9.1	ESE	82	81	59	72	55	MAP
	87.4	65.2	76.3	6.78	7.86	8	0										HSTD
85.8	85.5	76.7	81.1	5.63	6.64	2	0	13		10.7						58	MB (JUN)
	87.9	74.2	81.2	6.8	4.29#	8	0	11									HAFB
	88.0	73.5	80.8	7.37	7.43	10	0	14	12	8.0	SE	86	84	64	75	66	MAP
	89.6	69.1	79.4	8.51	6.47	17	0										HSTD
87.8	87.0	77.6	82.3	4.45	4.94	3	0	14		10.9						59	MB (JUL)
	88.5	75.2	82.0	8.7	3.24#	8	0	14									HAFB
	88.8	74.7	81.8	6.75	4.55	16	0	16	16	7.9	SE	86	84	64	75	64	MAP
	90.3	70.6	80.5	8.10	4.11	22	0										HSTD
88.5	87.7	78.1	82.9	5.06	5.34	6	0	14	14	10.5						58	MB (AUG)
	89.1	75.0	82.2	6.9	2.64#	13	0	15									HAFB
	89.7	74.9	82.3	6.97	6.92	21	0	16	16	7.3	SE	86	86	63	76	64	MAP
	91.0	71.0	81.0	7.96	4.61	25	0										HSTD

TABLE 2.6-1 (CONTINUED)

CLIMATOLOGICAL DATA

TEMPERATURE - °F				PRECIPITATION		MEAN NUMBER OF DAYS				WIND**		RELATIVE HUMIDITY				SKY**	
OCEAN TEMP.	DAILY MAX.	DAILY MIN.	MONTH-LY	MEAN	GREATEST DAILY	TEMP-MORE THAN 90°F	TEMP-LESS THAN 32°F	PRECIP-0.01 IN. OR MORE	THUNDER STORMS	MEAN HRLY. SPEED(mph)	DIREC-TION	1:00 AM EST	7:00 AM EST	1:00 PM EST	7:OO PM EST	MEAN SKY COVER - %	
86.3	86.0	77.3	81.7	7.36	8.35	2	0	17		11.8						61	MB (SEP)
	87.5	74.8	81.3	6.1	8.68#	6	0	16									HAFB
	88.0	74.6	81.3	9.47	7.58	11	0	18	11	8.1	ESE	87	88	66	79	67	MAP
	89.5	70.8	80.2	9.58	10.04	16	0										HSTD
82.1	83.0	73.8	78.4	6.71	5.85	*	0	15		14.2						56	MB (OCT)
	83.5	69.6	76.8	7.5	3.51#	1	0	12									HAFB
	84.7	70.9	77.8	8.21	9.95	1	0	15	6	9.0	ENE	86	88	63	77	60	MAP
	86.2	67.3	76.8	8.61	11.50	3	0										HSTD
77.2	78.4	69.2	73.8	2.53	6.70	0	0	8		13.3						47	MB (NOV)
	79.7	65.7	72.9	1.9	3.95#	0	0	6									HAFB
	80.2	64.6	72.4	2.83	7.93	0	0	7	1	9.0	N	83	87	61	75	52	MAP
	81.6	60.4	71.0	2.76	11.00	*	*										HSTD
73.3	75.5	65.1	70.3	1.78	2.07	0	0	8		12.3						48	MB (DEC)
	75.5	59.6	67.7	2.1	1.91#	0	0	7									HAFB
	77.1	59.1	68.1	1.67	4.38	0	0	7	1	8.4	N	84	86	59	74	53	MAP
	78.6	55.6	67.1	1.32	2.08	0	*										HSTD
80.1	80.9	71.4	76.2	46.26	8.35	14	0	123		12.1						52	MB (YEAR)
	83.2	68.8	76.1	54.0	8.68#	38	0	112									HAFB
	83.1	67.1	75.1	59.76	9.95	63	0	125	77	8.9	ESE	84	85	60	74	57	MAP
	84.8	63.1	74.0	63.04	11.50	96	1										HSTD

YEARS OF RECORD:	Miles from Biscayne Bay
Miami Beach (MB) 1931-1960	0
Homestead AFB (HAFB) Feb. 1943-Sept. 1944, May-Nov. 1945, Jan. 1956-Sept. 1959	3
Miami Airport (MAP) 1931-1960	6
Homestead Experiment Sta. (HSTD) 1910-1961	10

* Less than One-Half
** Sunrise to Sunset - Miami City Office Data - (3 miles inland)
\# 1960-1964 Data

NOTE: Years of Record for HAFB too short to be climatological

TABLE 2.6-2

CUMULATIVE PER CENT FREQUENCY OF INVERSIONS BASED 0-100 FT AT
MIAMI AIRPORT - 1960-1964 INCLUSIVE

CUMULATIVE PERCENT

Thickness of Inversion-Ft	DRY SEASON * 7-PM EST Wind On	Wind Off	Wind Mix.	DRY SEASON * 7-AM EST Wind On	Wind Off	Wind Mix.	WET SEASON * 7-PM EST Wind On	Wind Off	Wind Mix.	WET SEASON * 7-AM EST Wind On	Wind Off	Wind Mix.	Number of Inversions Based on 0-100 Ft	Cumulative % of Inversions Based on 0-100 Ft
000- 200														
201- 300	6.4	5.9		8.2	2.4	9.4	6.1			6.2	3.6	5.6	63	5.2
301- 400	35.4	35.3		39.0	16.4	36.8	24.3	23.1	8.3	36.3	27.4	22.5	278	28.1
401- 500	45.1	52.9	75.0	64.8	36.2	55.7	54.6	42.3	41.6	74.4	57.2	61.3	340	56.0
501- 600	77.4	94.1		83.0	56.3	79.3	60.7		49.9	90.9	68.9	83.2	217	73.9
601- 700	87.1	100.0		93.1	63.3	91.6	63.7	46.1	58.2	93.7	77.0	91.3	91	81.5
701- 800	93.6		100.0	96.2	71.5	93.5	66.7	57.6		96.0	83.0	96.9	62	86.5
801- 900	96.8			97.5	71.9	95.4	75.8	69.1	74.9	98.3	87.4	98.8	32	89.3
901-1000	100.0			98.1	78.5	98.2	81.9	84.5	83.2	98.9	94.3	100.0	48	93.1
1001-1100					80.6				91.5	99.5	94.7		8	93.7
1101-1200					84.3	99.1	94.0	88.3		100.0	95.9		19	95.3
1201-1300				99.4	86.4	100.0					97.9		13	96.4
1301-1400					88.5		97.0	92.1					7	97.0
1401-1500					89.3				100.0		98.3		4	97.3
1501-1600					91.8		100.0						7	97.9
1601-1700					93.0								3	98.1
1701-1800														
1801-1900				100.0	94.2						99.5		7	98.7
1901-2000					96.3			95.9			100.0		7	99.3
Over 2000					100.0			100.0					9	100.0

AUXILIARY DATA

Number of Soundings with Inversions Based:													Total
0-100 Ft.	31	17	4	159	243	106	33	26	12	176	248	160	1215
0-2000 Ft.	67	37	6	164	338	111	88	38	15	183	271	163	1481
Total Soundings Taken Years 1960 thru 1964	583	273	51	378	406	123	703	168	49	387	335	198	3654

* Dry Season: November-April
* Wet Season: May-October

Wind:
On = Onshore, Both Sfc. and 1000 mb Winds $\geq$ 31°F $\leq$ 210°F
Off = Offshore, Both Sfc. and 1000 mb Winds $\geq$ 211°F $\leq$ 30°F
Mix = Mixed, Sfc. and 1000 mb Winds are not the same direction

(Blanks indicate no inversion in that particular category)

TABLE 2.6-3

MEAN TEMPERATURE LAPSE RATE ($\bar{\gamma}$) IN ° F/1000 FT WITHIN INVERSIONS
BASED 0-100 FT AT MIAMI AIRPORT 1960-1964 INCLUSIVE

	Mean Temperature Lapse Rate ($\bar{\gamma}$) in °F/1000 Ft.											
	DRY SEASON *						WET SEASON *					
	7-PM EST			7-AM EST			7-PM EST			7-AM EST		
Thickness of Inversion-Ft	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.
000- 200												
201- 300	-6.2	-0.6		-15.8	-17.0	-20.4	-3.5			-8.2	-8.5	-10.8
301- 400	-1.8	-3.9		-9.4	-16.8	-18.7	-4.1	-2.9	-2.4	-6.6	-9.5	-8.4
401- 500	-0.3	-4.5	-1.9	-4.2	-10.8	-9.5	-5.0	-2.9	-4.6	-3.3	-5.9	-5.2
501- 600	-0.9	-2.7		-3.4	-8.4	-8.1	-0.7		-1.1	-2.1	-5.5	-3.6
601- 700	-1.9	0		-4.3	-7.6	-6.8	-0.6	-0.5	-6.4	-1.3	-3.7	-3.8
701- 800	-0.8		0	-2.8	-7.5	-5.7	-1.5	-3.4		-3.4	-3.6	-2.3
801- 900	-0.7			-1.9	-1.6	-9.3	-4.2	-3.9	0	-1.0	-3.4	-0.6
901-1000	-2.0			-5.9	-4.6	-6.0	-2.8	-3.8	-2.7	-1.7	-1.9	-1.7
1001-1100					-5.7				-1.6	-3.6	-5.4	
1101-1200					-3.4	-7.9	-2.5	-1.0		-0.7	-1.5	
1201-1300				-2.6	-4.1	-7.8					-3.1	
1301-1400					-3.9		-0.3	-0.4				
1401-1500					-3.1				0		-2.9	
1501-1600					-4.9		-0.7					
1601-1700					-4.0							
1701-1800												
1801-1900				-4.8	-1.9						-1.3	
1901-2000					-2.9			-0.6			-1.5	
Over 2000					-1.7			-1.0				

* Dry Season: November-April
* Wet Season: May-October

Wind:
On = Onshore, Both Sfc. and 1000 mb Winds ≥ 31°F ≤ 210°F
Off = Offshore, Both Sfc. and 1000 mb Winds ≥ 211°F ≤ 30°F
Mix = Mixed, Sfc. and 1000 mb Winds are not the same direction

(Blanks indicate no inversion in that particular category)

TABLE 2.6-4

MEAN INCREASE IN SURFACE TEMPERATURE ($\bar{A}$) IN °F TO PRODUCE AN ADIABATIC LAPSE RATE BELOW THE TOPS OF INVERSIONS BASED 0-100 FT AT MIAMI AIRPORT 1960-1964 INCLUSIVE

	Mean Increase in Temperature ($\bar{A}$) IN Degrees Fahrenheit											
	DRY SEASON *						WET SEASON *					
	7-PM EST			7-AM EST			7-PM EST			7-AM EST		
Thickness of Inversion-Ft	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.	Wind On	Wind Off	Wind Mix.
000- 200												
201- 300	2.9	1.1		4.9	5.8	6.4	1.8			3.5	3.9	4.0
301- 400	1.8	3.2		4.4	7.0	7.3	3.6	3.1	2.9	4.1	5.3	4.9
401- 500	2.1	4.0	2.3	3.9	6.8	6.1	4.3	3.3	4.1	3.6	4.6	4.3
501- 600	2.5	3.7		3.8	6.6	6.4	3.0		3.2	3.4	5.3	4.0
601- 700	5.0	3.8		5.6	7.6	6.7	3.6	3.6	7.4	3.4	5.6	5.6
701- 800	4.2		3.5	5.5	8.8	7.7	5.1	6.4		6.2	6.4	5.4
801- 900	5.9			5.2	5.4	11.1	8.0	7.5	4.1	5.3	7.1	4.4
901-1000	6.3			9.7	8.5	9.8	4.9	8.5	7.2	6.0	6.7	6.6
1001-1100					10.9				7.0	9.1	10.8	
1101-1200					9.5	13.7	8.3	6.8		6.3	7.9	
1201-1300				9.4	11.7	15.5					10.2	
1301-1400					11.9		8.0	7.6				
1401-1500					11.7				7.4		11.9	
1501-1600					14.8		9.0					
1601-1700					14.8							
1701-1800												
1801-1900				18.8	12.9						12.0	
1901-2000					15.5			10.6			12.6	
Over 2000					18.0			17.1				

* Dry Season: November-April
* Wet Season: May-October

Wind:
On = Onshore, Both Sfc. and 1000 mb Winds ≥ 31°F ≤ 210°F
Off = Offshore, Both Sfc. and 1000 mb Winds ≥ 211°F ≤ 30°F
Mix = Mixed, Sfc. and 1000 mb Winds are not the same direction

(Blanks indicate no inversion in that particular category)

TABLE 2.6-5

MEAN SURFACE TO 1000 MB WIND SPEED SHEAR IN KNOTS (△C)
AT TIMES WHEN INVERSIONS ARE BASED 0-100 FT AT
MIAMI AIRPORT 1960-1964 INCLUSIVE

Wind Speed Shear in Knots (△C)

Thickness of Inversion-Ft	DRY SEASON * 7-PM EST Wind On	Wind Off	Wind Mix.	7-AM EST Wind On	Wind Off	Wind Mix.	WET SEASON * 7-PM EST Wind On	Wind Off	Wind Mix.	7-AM EST Wind On	Wind Off	Wind Mix.
000- 200												
201- 300	1.9	1.9		5.7	3.6	4.5	1.0			3.0	0.6	2.6
301- 400	4.5	3.5		5.2	3.8	4.2	1.9	3.2	0.0	3.7	1.8	3.7
401- 500	3.2	1.3	3.9	6.0	3.3	3.8	-0.4	1.9	1.9	3.6	1.6	2.0
501- 600	2.3	1.9		5.1	3.8	3.9	5.8		1.9	4.2	2.0	2.3
601- 700	0.6	0.0		6.6	3.4	2.7	7.8	-5.8	-1.9	2.7	3.1	3.4
701- 800	2.9		0.0	6.2	4.5	1.9	1.9	1.3		2.9	2.5	1.7
801- 900	0.0			6.8	7.8	6.8	3.2	0.0	0.0	2.4	1.2	1.3
901-1000	1.9			0.0	4.9	2.6	1.9	0.5	-1.9	5.8	0.8	8.7
1001-1100					1.6				-1.9	-3.9	7.8	
1101-1200					3.2	-1.9	1.5	1.9		1.9	1.9	
1201-1300				4.9	2.3	3.9					1.6	
1301-1400					7.4		1.9	1.9				
1401-1500					1.9				0.0		1.9	
1501-1600					3.9		-1.9					
1601-1700					0.6							
1701-1800												
1801-1900				3.9	6.5						1.9	
1901-2000					5.4			0.0			0.0	
Over 2000					5.6			0.0				

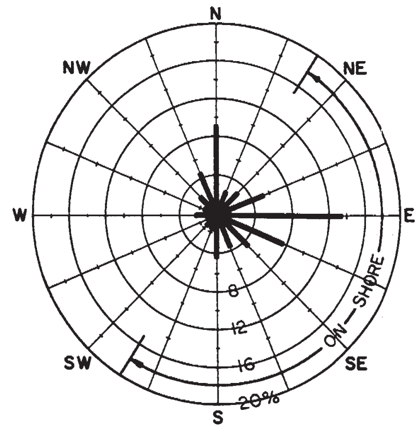
AUXILIARY DATA

△C with no Inversions Based 0-200 Ft.	2.9	3.3	4.6	6.0	2.7	5.1	1.6	0.8	1.2	3.9	2.0	3.3
△C All Soundings Years 1960 thru 1964	3.0	3.3	4.4	5.8	4.4	3.9	1.5	1.0	1.4	3.8	1.9	2.6

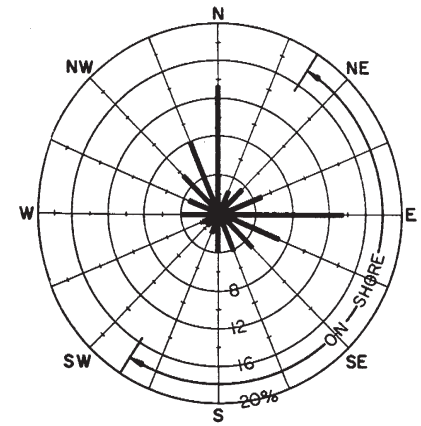
* Dry Season: November-April
* Wet Season: May-October

Wind:
On = Onshore, Both Sfc. and 1000 mb Winds ≥ 31°F ≤ 210°F
Off = Offshore, Both Sfc. and 1000 mb Winds ≥ 211°F ≤ 30°F
Mix = Mixed, Sfc. and 1000 mb Winds are not the same direction

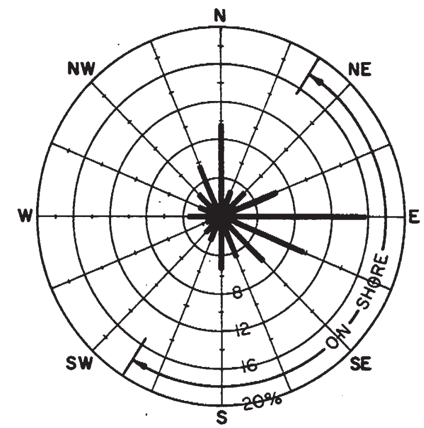
(Blanks indicate no inversion in that particular category)



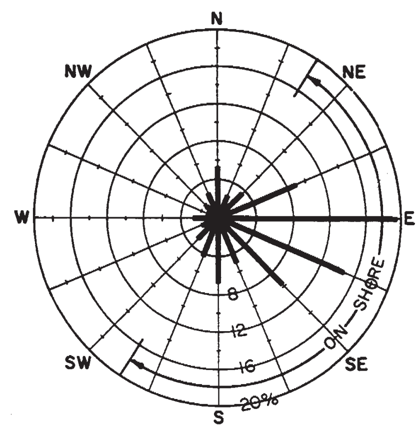
MAY - OCT
7PM-6AM EST
31.9% CALM



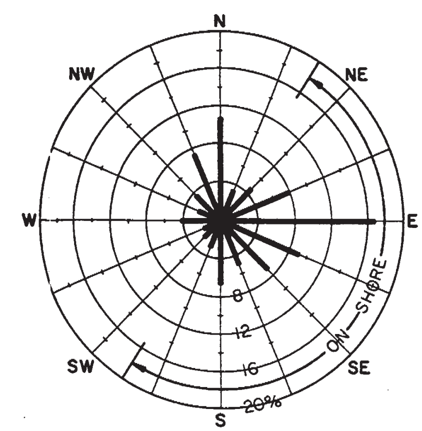
NOV - APR
7PM-6AM EST
17.4% CALM



ALL DATA
15.6% CALM

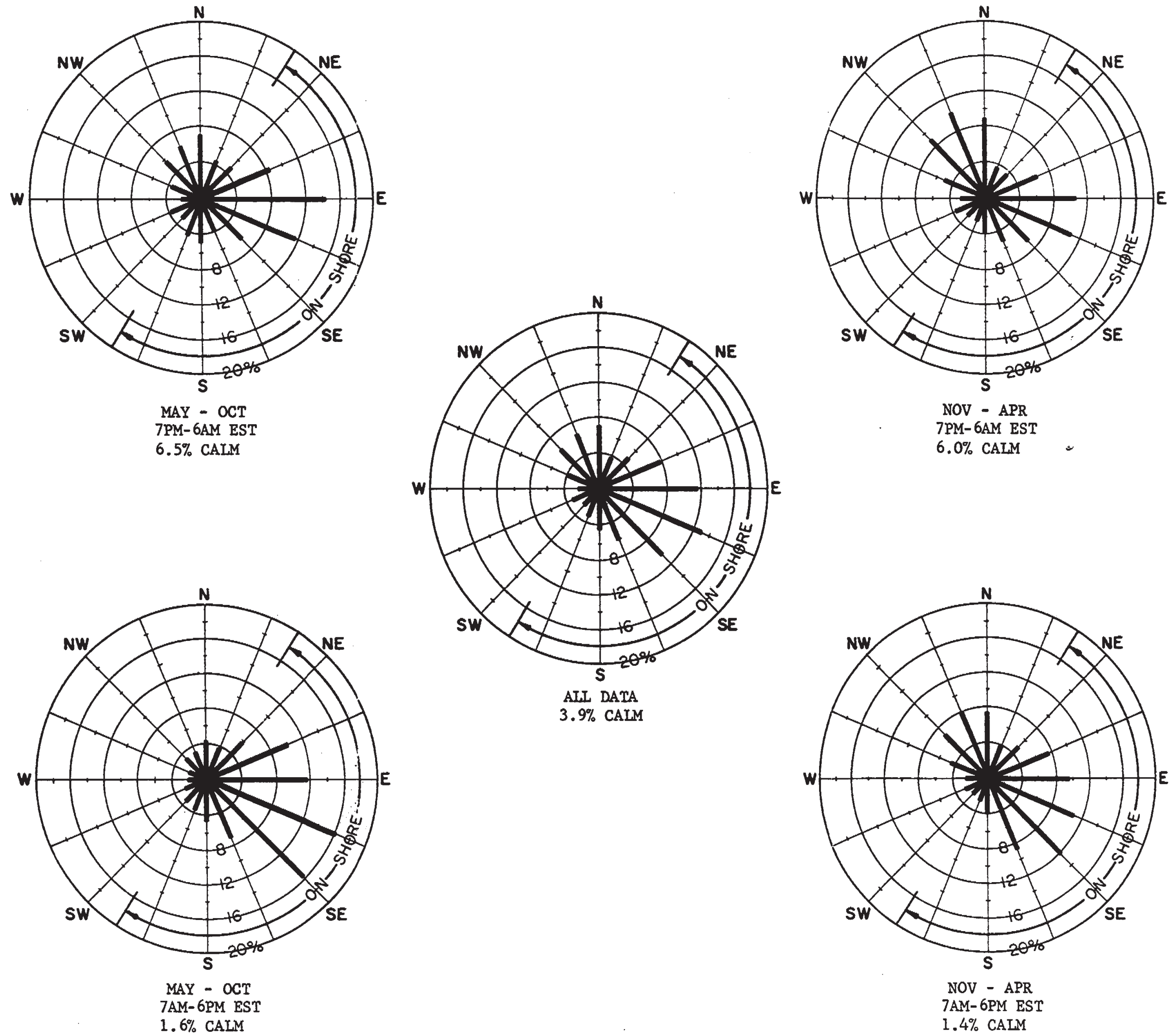


MAY - OCT
7AM-6PM EST
8.5% CALM

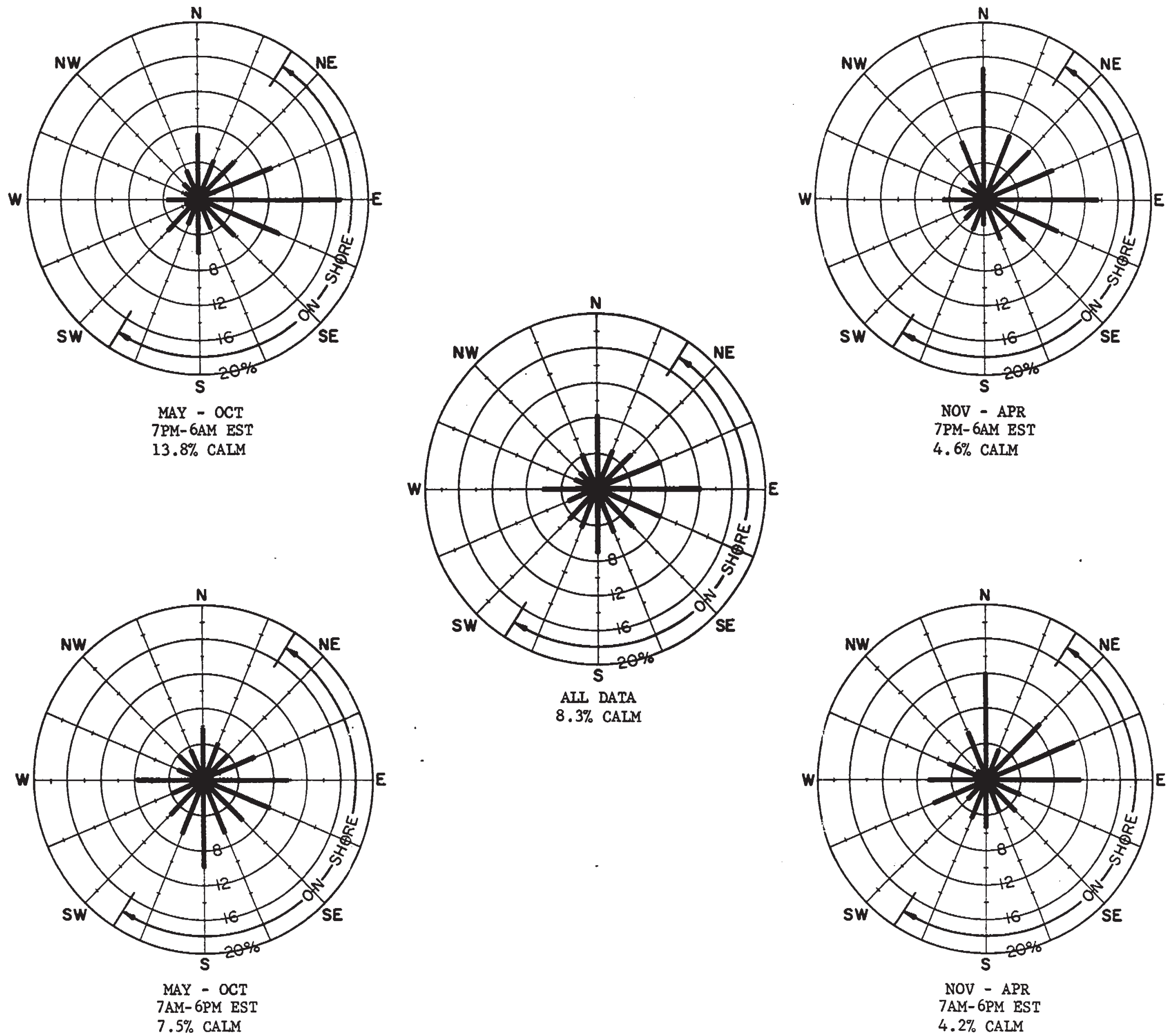


NOV - APR
7AM-6PM EST
4.4% CALM

WIND DIRECTION ROSES - RAIN
OR SUNSHINE, HOMESTEAD AFB
FIG. 2.6-1

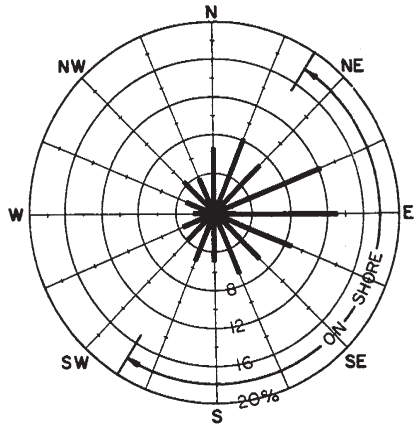


WIND DIRECTION ROSES - RAIN
OR SUNSHINE, MIAMI AIRPORT
FIG. 2.6-2

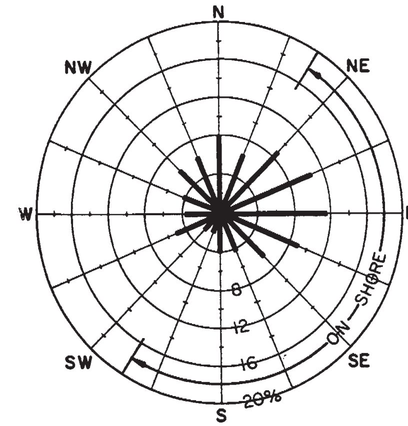


WIND DIRECTION ROSES - DURING RAIN, HOMESTEAD AFB

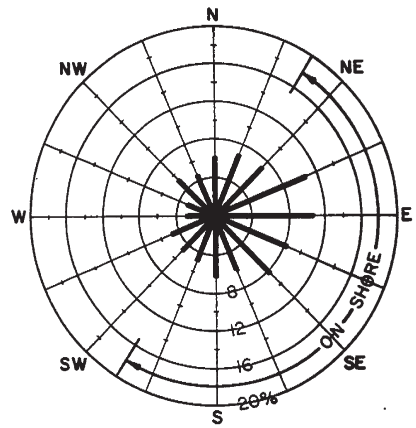
FIG. 2.6-3



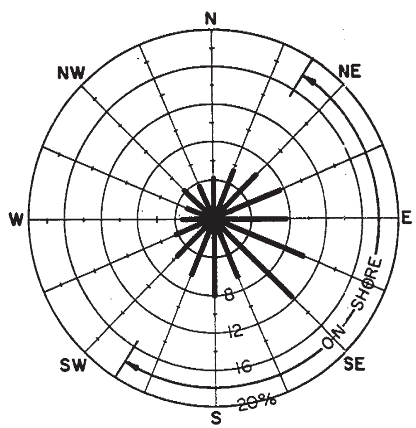
MAY - OCT
7PM-6AM EST
1.9% CALM



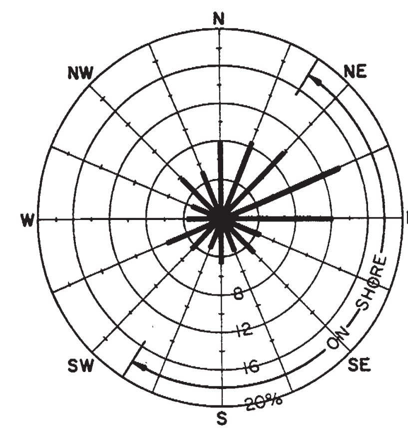
NOV - APR
7PM-6AM EST
2.2% CALM



ALL DATA
1.8% CALM



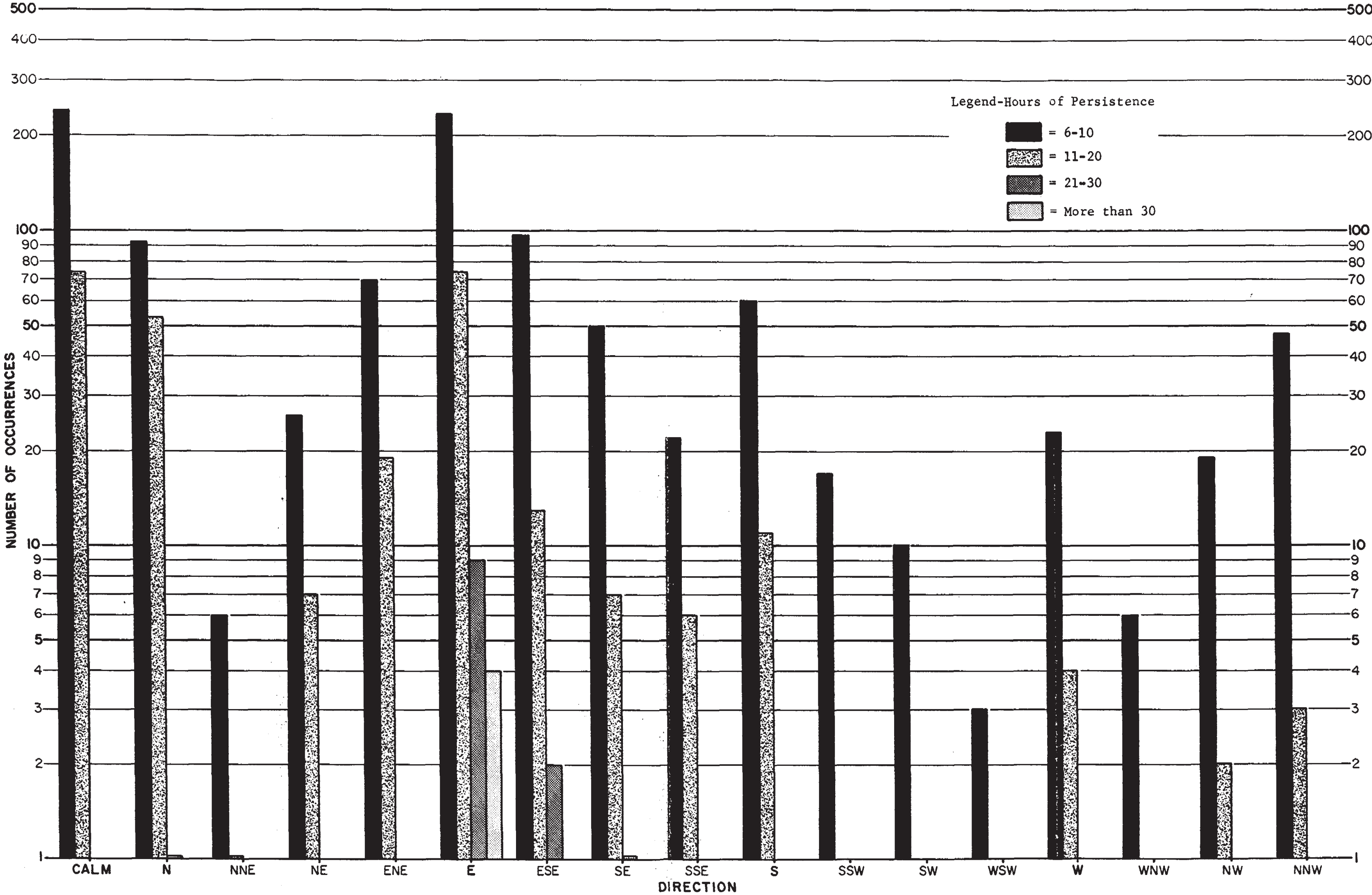
MAY - OCT
7AM-6PM EST
2.3% CALM



NOV - APR
7AM-6PM EST
0.2% CALM

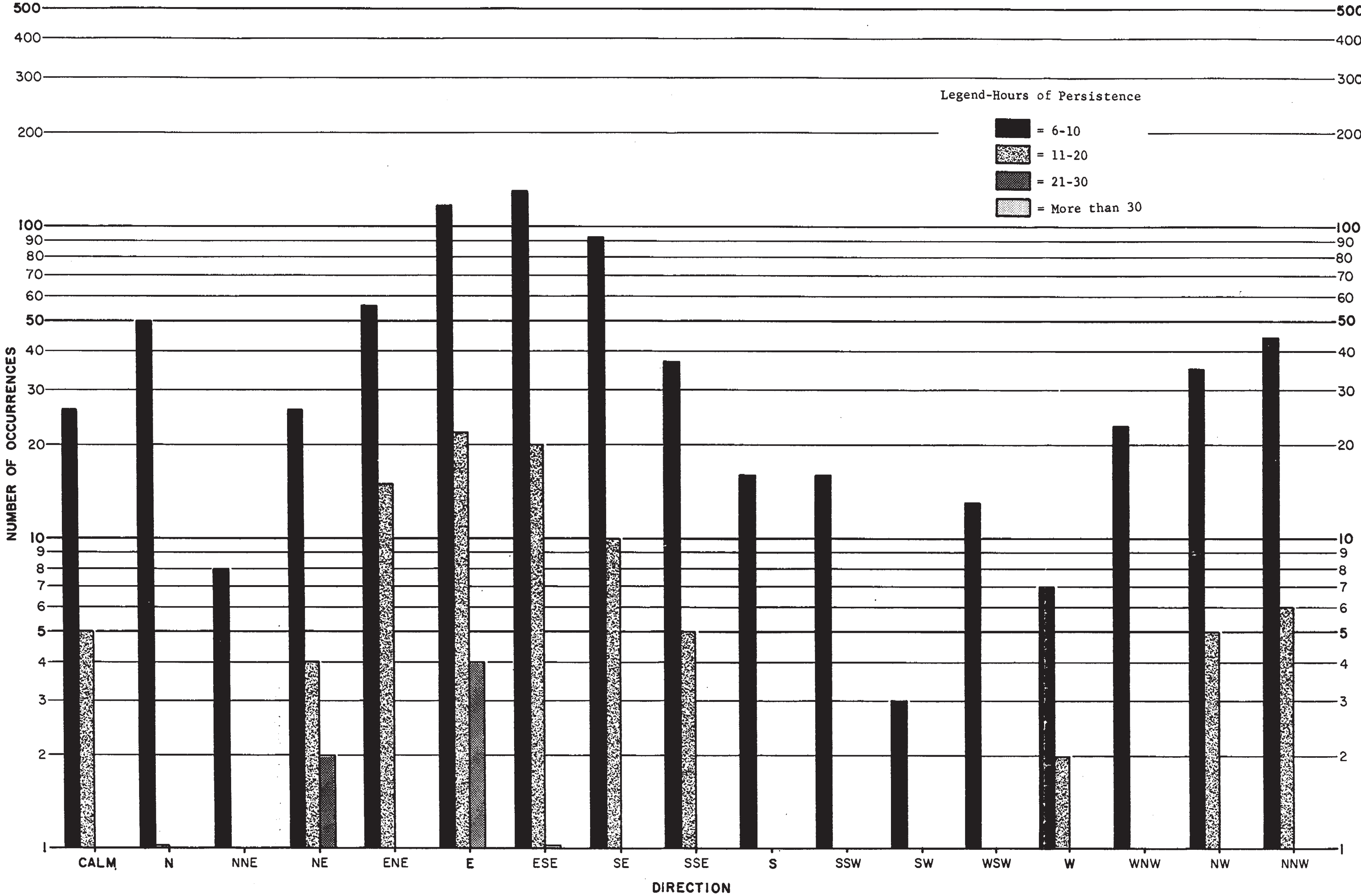
WIND DIRECTION ROSES - DURING RAIN, MIAMI AIRPORT

FIG. 2.6-4



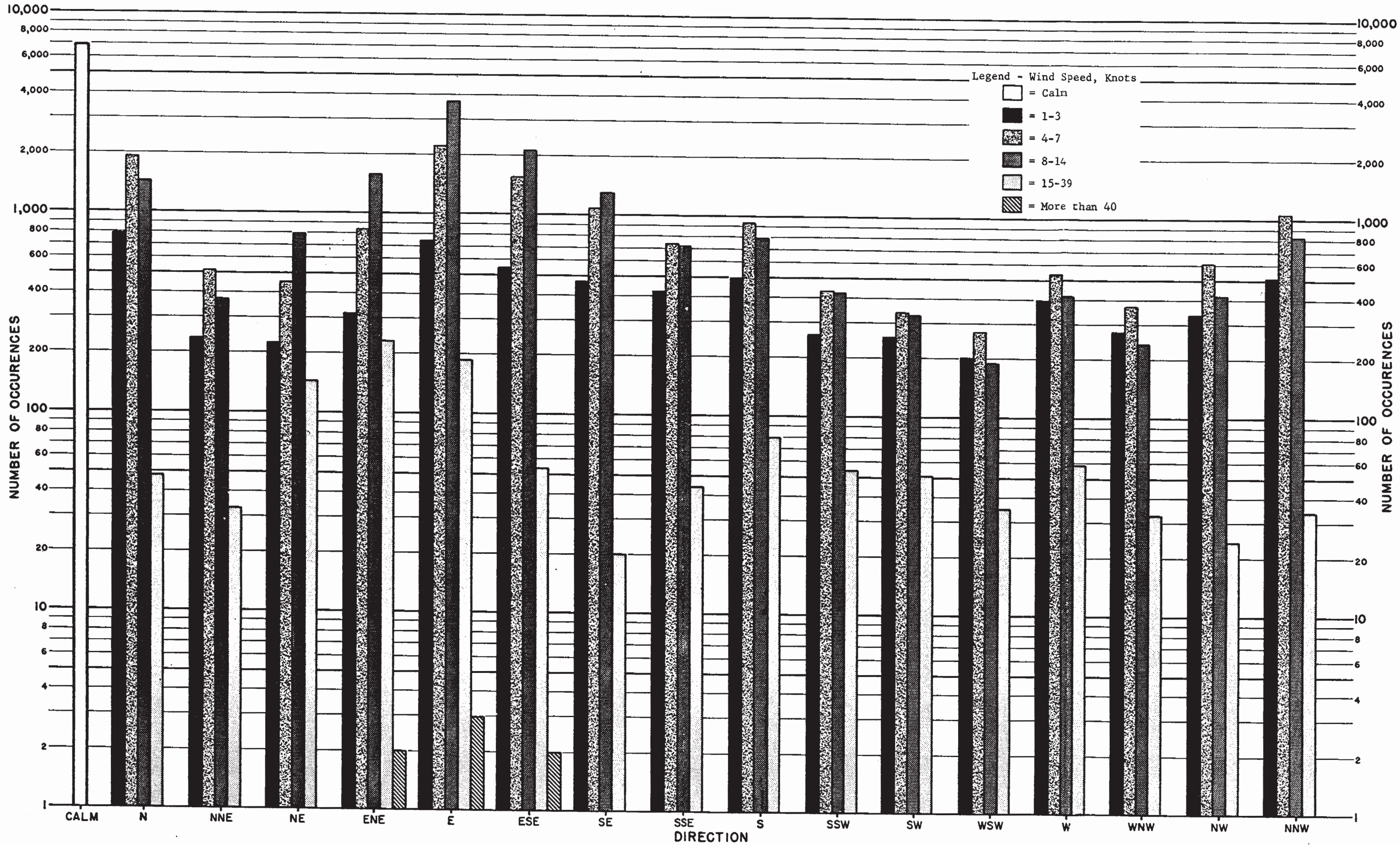
FREQUENCY OF WIND DIRECTION
PERSISTENCE BY DIRECTION
HOMESTEAD AFB

FIG. 2.6-5

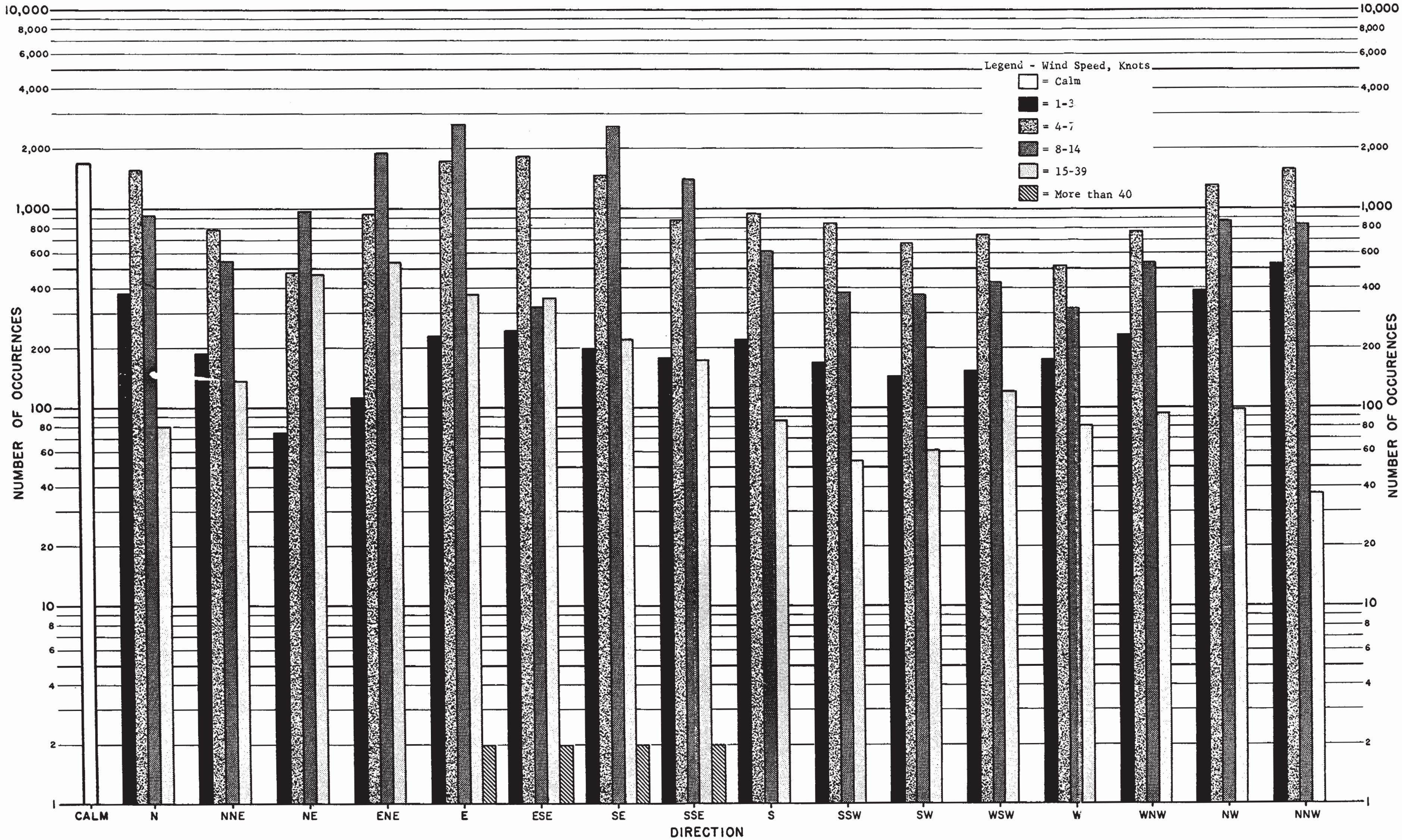


FREQUENCY OF WIND DIRECTION
PERSISTENCE BY DIRECTION
MIAMI AIRPORT

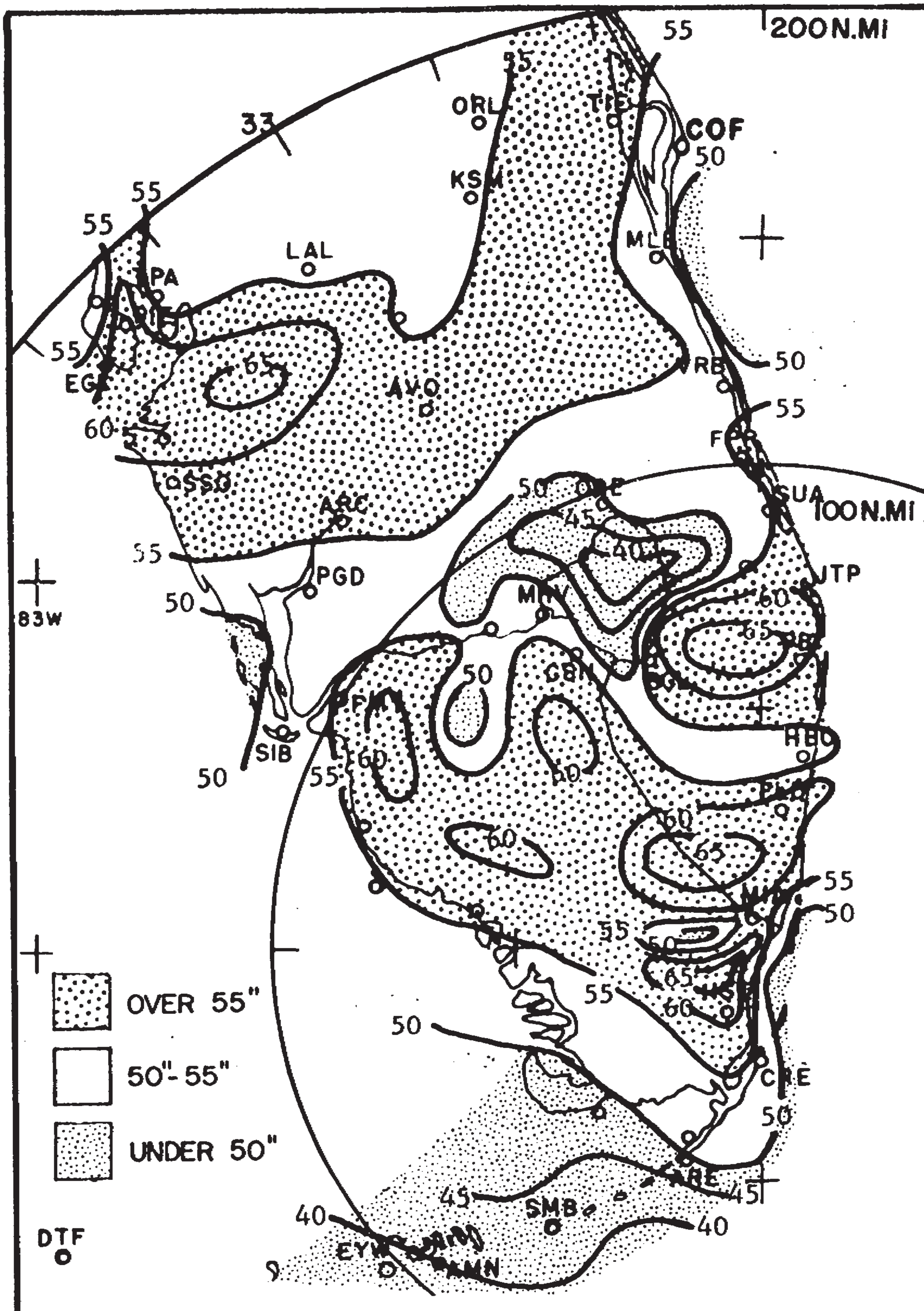
FIG. 2.6-6



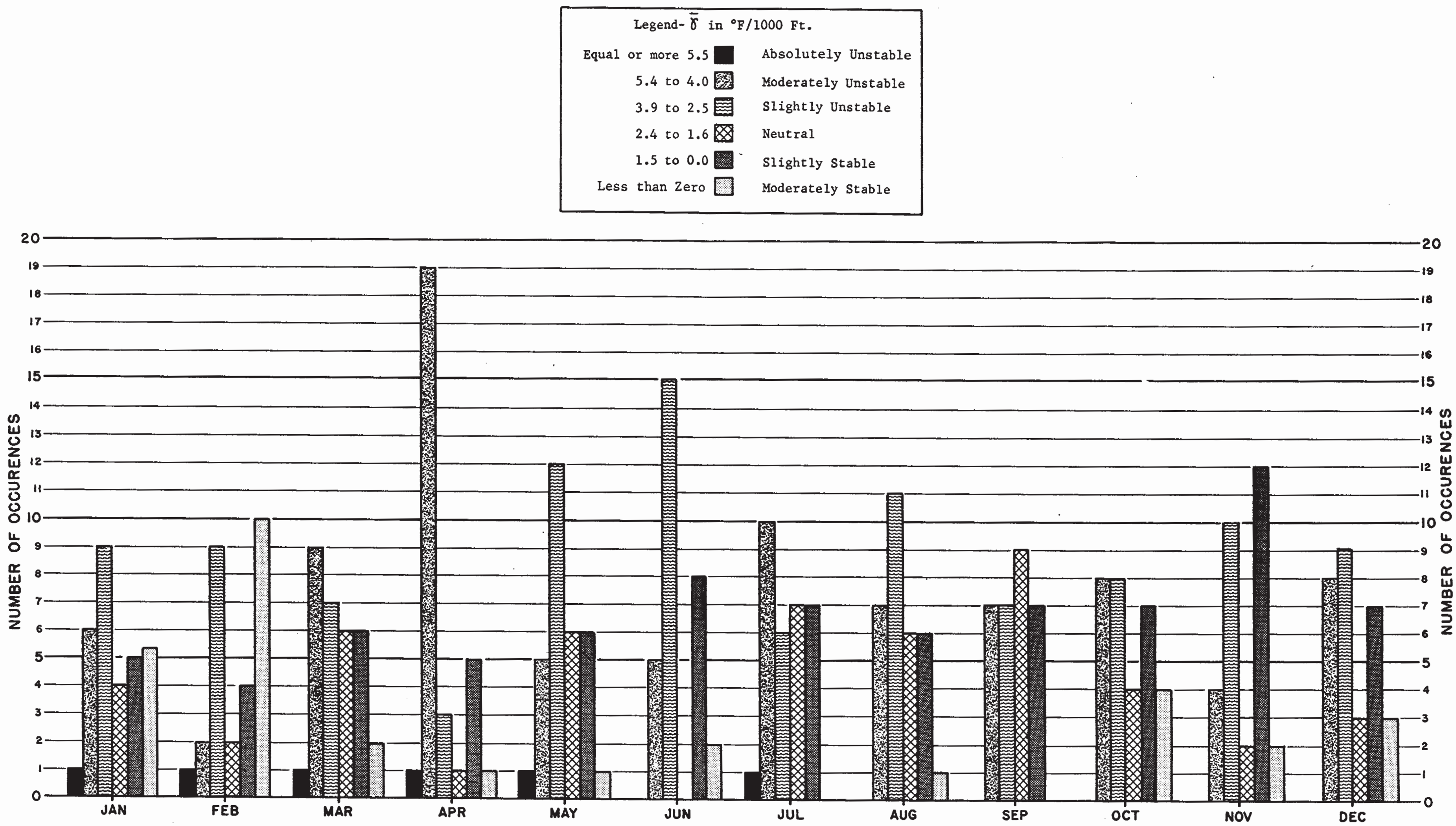
FREQUENCY OF WIND SPEEDS BY
DIRECTION, HOMESTEAD AFB
FIG. 2.6-7



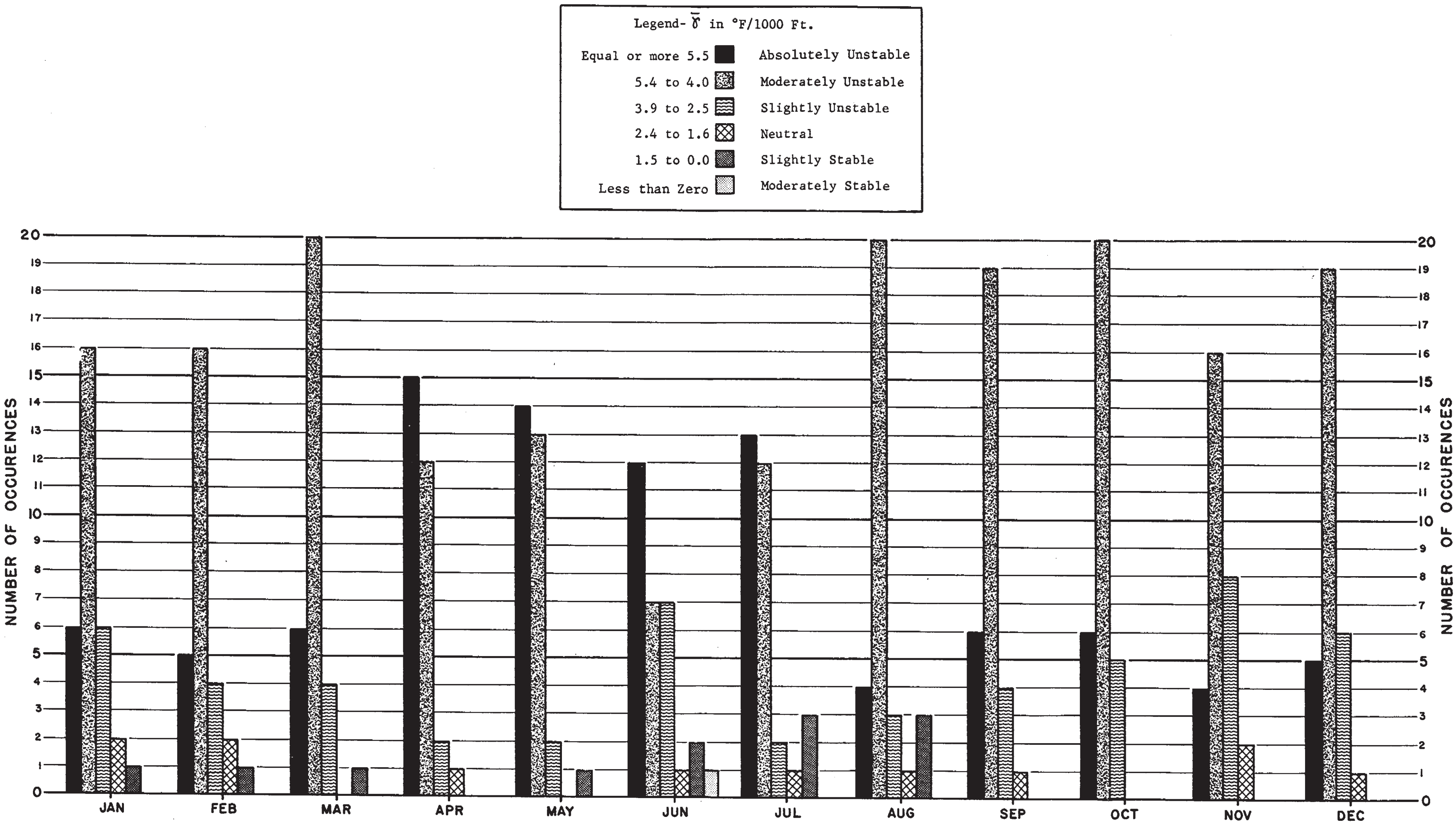
FREQUENCY OF WIND SPEEDS BY
DIRECTION MIAMI AIRPORT
FIG. 2.6-8



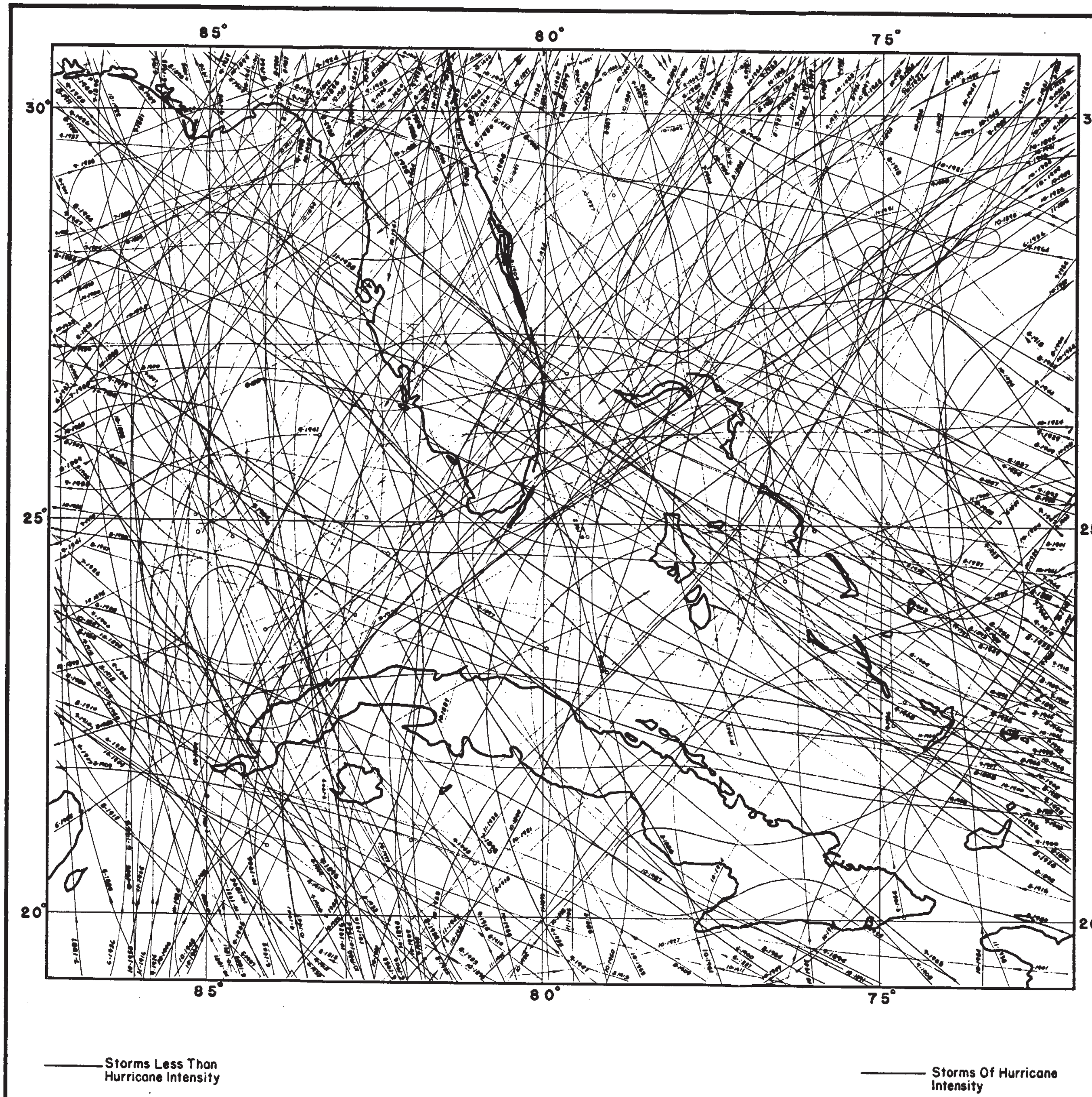
MEAN ANNUAL RAINFALL IN INCHES, SOUTH AND SOUTH CENTRAL FLORIDA, 1952-1962 INCL.



TEMPERATURE LAPSE, SURFACE -
950 MB, MIAMI AIRPORT 7AM
FIG. 2.6-10

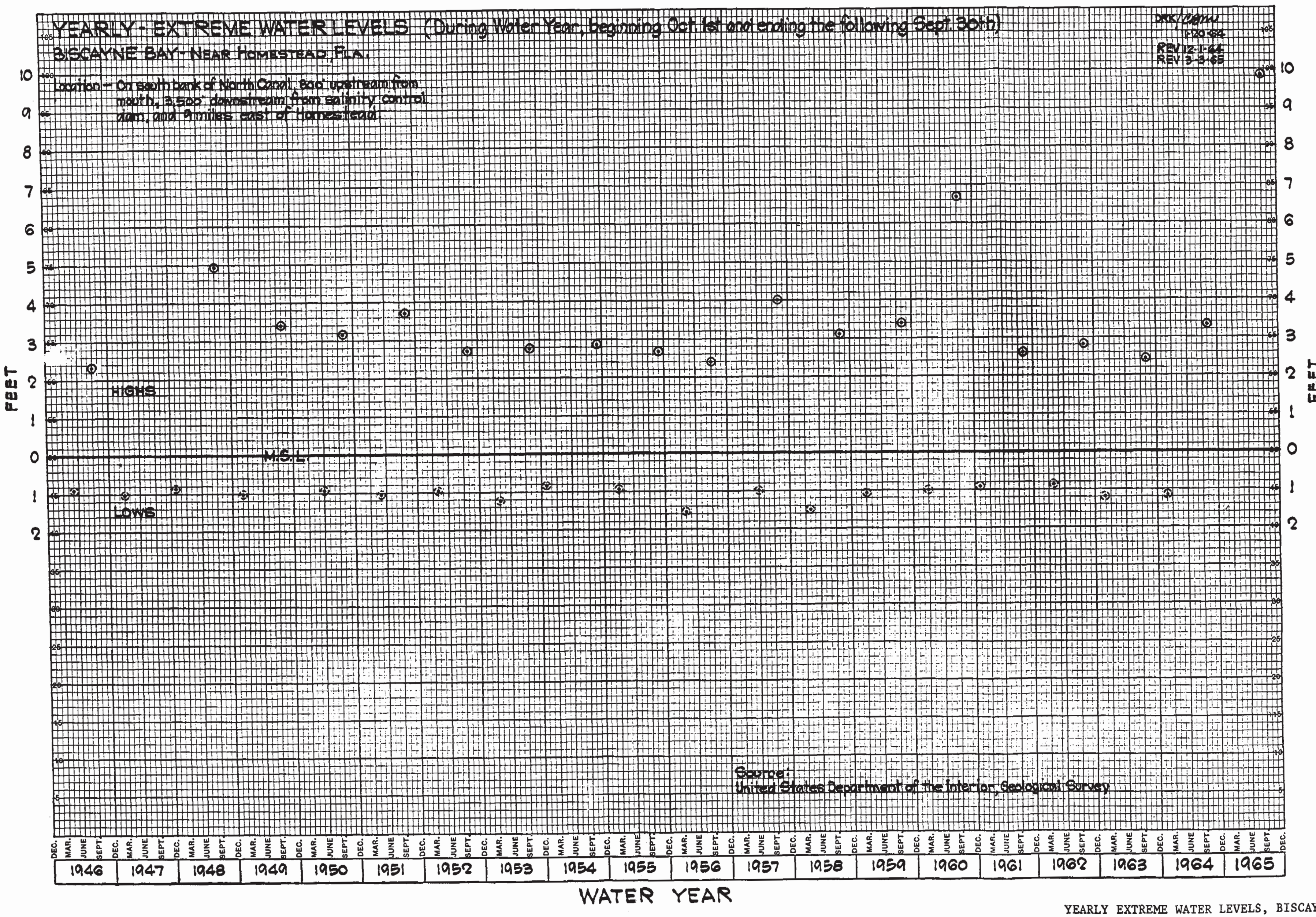


TEMPERATURE LAPSE, SURFACE - 950 MB, MIAMI AIRPORT 7PM
FIG. 2.6-11



TROPICAL STORM PATHS, 1886 - 1964

FIG. 2.6-12



YEARLY EXTREME WATER LEVELS, BISCAYNE BAY, NEAR HOMESTEAD, FLORIDA

FIG. 2.6-13

2.7 HYDROLOGY (SURFACE WATER)

2.7.1 INTRODUCTION

Studies have been made of the surface drainage characteristics of the site and area. The studies included examination of topographic maps; interpretation of aerial photographs; aerial reconnaissance of the site and vicinity by helicopter; review of reports describing the drainage history of the area, flood control, and drainage projects; and review of storm and flood records.

2.7.2 AREA

The direction of natural drainage of the area is to the east and south toward Biscayne Bay. On the west, the drainage area is essentially limited by the Atlantic Coastal Ridge, a broad low ridge which extends from Miami to southwest of Florida City. The land slopes gradually from the coastal ridge, which is about 5 to 10 ft above MSL at Homestead, southeast toward the site which is at or near sea level. As the geologic history of the Florida Peninsula has been one of slow subsidence, the shallow tidal creeks and broad swales are submerged, and stream flow is extremely sluggish. The permeable limestone bedrock of the area has not allowed development of an integrated surface drainage system, as most of the rainfall is recharged directly to the ground-water reservoir.

There is no lake or perennial stream within the area. Yearly rainfall averages approximately 60 inches, about 75 percent of which occurs during the period from May through October. Roughly two-thirds of the rainfall is recharged to the ground-water system. In the absence of well defined stream channels, run-off occurs in slow sheet-like flows toward the bay during periods of high precipitation. Evidence of the direction of drainage is shown by the curvilinear drainage lines and vegetation features which are apparent from the air, as seen in Figure 2.2-2. Manmade drainage and flood control canals direct some surface flow away from the site.

2.7.3 SITE

The plant site is located on mangrove-covered tidal flats adjacent to Biscayne Bay. The ground surface elevation is less than 1 foot above MSL. The normal tide range of the bay is about 2 feet, thus the entire site is inundated with sea water during high tide except for that part built up with compacted limestone rock fill. During low tides, brackish water drains sluggishly towards the bay through small, meandering, shallow drainage courses and tidal creeks which traverse the area. However, most of the site area remains under 1 to 3 inches of water, even at low tide. Vegetation consists of brackish water plants such as stunted mangrove and marsh grass. Some pockets of fresh water vegetation are found in circular mounded areas of decayed vegetation known as hammocks. Apart from some fresh water trapped in these areas, all of the surface water and shallow ground water in the vicinity of the site is highly saline because of tidal inundation and salt water intrusion.

2.7.4 SITE FLOODING

Tidal flooding during hurricanes places more water in a short period of time on the area than does rainfall. Therefore, tidal flooding is the major surface hydrologic feature of the area, and rainfall is the minor surface hydrologic feature.

The highest tide that has been measured nearest the site was measured at an elevation of 10.1 ft above MSL during Hurricane Betsy in September, 1965. This station where measurement was made is located 30 ft upstream of the salinity dam on the Florida City Canal. The site is located 1 mile east and 1 mile south of the salinity dam. It has been reported that debris marks from the flood tide associated with Hurricane Betsy were seen approximately 10 ft above sea level at the site.

Because of the low flat terrain, tidal floodwaters move inland several miles and cover large areas. Based on available information, dissipation of floodwaters by sheet flow and through natural and manmade drainage courses requires several days. The amount of infiltration of tidal floodwaters into inland ground-water supplies depends on the amount of water already in the shallow aquifer prior to inundation, with much greater infiltration occurring when prestorm water levels are below normal. During the hurricane period of June through October, the groundwater levels are generally at their highest, the storage capacity of the aquifer is filled, and additional ground-water recharge is at a minimum.

2.7.5 FLOOD CONTROL

Construction of flood control projects in the area reduced the possibility of tidal floodwater reaching agricultural and populated areas. Of special interest is Levee L-31 built by the Army Corps of Engineers, in cooperation with the Central and Southern Florida Flood Control District. This project includes a levee with a crest elevation of about 7 ft above MSL, running in a north-south direction from a point 9 miles north to a point miles southwest of the site. It passes approximately 2 miles west of the site. The levee and its appurtenant works are designed to provide surface salinity control and flood protection against most non-hurricane storm tides and are not designed to prevent flooding from very severe storms. For storms with extreme high tides of unusually long duration, there would be little reduction in the extent and depth of flooding. However, for a storm of the intensity and duration of Hurricane Betsy, 1965, inland movement of tidal floodwaters would be somewhat reduced, and it is estimated that flooding would be limited to less than 2 miles west of the levee, i.e., 4 miles west of the site. Based on published storm tide frequency studies, it is estimated that a 7 ft tide may occur once every 20 to 25 years.

2.7.6 SUMMARY

Under normal conditions, surface water drains very slowly toward the bay. Near the shoreline, this drainage is influenced by tidal conditions. During hurricanes, large inland areas are covered by floodtides. A small part of such floodwater may reach the ground-water table in the areas of ground-water use. The amount depends on prestorm ground-water table levels. Flood control measures substantially reduce the area subject to flood inundation for all but the most severe storms.

2.8 OCEANOGRAPHY

Card Sound mixing and flushing studies were carried out by the Coastal and Oceanographic Engineering Department of the University of Florida. These studies describe the capability of the Card Sound waters in the vicinity of the cooling water discharge to dilute and disperse the cooling water effluent. The report is issued as Appendix 2C to this section of the FSAR.

2.9 GEOLOGY

2.9.1 INTRODUCTION

A geologic program including a regional geologic survey, borings, test probings, geophysical survey, and other site studies, has been completed.

The geologic characteristics of the site and area have been investigated as follows:

(1) The regional and local geologic structure was identified, and information on the character and thickness of the formations underlying the area was developed. This was based on existing geological data, a study of maps and reports, and discussions with geologists working in the area.

(2) The subsurface conditions at the site were investigated with 50 test borings, ranging in depth from 10 ft to 188½ ft. Rock cores were ecovered from 17 of these borings. In addition, a series of 62 rock probings, a geophysical uphole velocity survey, a ground motion survey, and a downhole television camera survey in a special 24-inch diameter boring were made. Previous to the above work, a series of 206 rock probings had been made in a part of the site. A bedrock surface contour map was made from the boring and probing data. The subsurface conditions were further investigated, via test borings, specifically for the addition of the Unit 4 Emergency Diesel Generator Building. Refer to Section 2.9.4 for additional information.

(3) Samples of rock core were subjected to laboratory tests to evaluate the physical and chemical properties of the foundation rock.

2.9.2 REGIONAL GEOLOGY

The site lies within the Floridian Plateau, which is the partly submerged southeastern peninsula of the North American continental shelf.

The Plateau, which separates the Atlantic deep from the deep waters of the Gulf of Mexico, has been described as a large horst which may be bounded by high-angle fault scarps at the edge of the shelf. In the vicinity of the site, the edge of the shelf is located some 18 miles offshore to the east. The peninsula is underlain by a thick series of sedimentary rocks, which in the southern part of the state consist essentially of gently dipping or flat-lying limestones and associated formations. Beneath these sedimentary formations are igneous and metamorphic basement rocks which correspond to those which underlie most of the eastern North American continent. The sedimentary rocks overlying the basement complex range from 4,000 ft thick in the northern part of the state to more than 15,000 ft thick in southern Florida. The strata range in age from Paleozoic to Recent. Deep borings indicate that in southern Florida the rock in the uppermost 5,000 ft is predominantly calcareous and ranges in age from late Cretaceous to Pleistocene. Mesozoic limestones, chalk and sandstones are underlain by Paleozoic shales and sandstones and Pre-Cambrian granitic basement.

The region is characterized by very simple geologic structures. The predominant structure affecting the thickness and attitude of the sedimentary formations in southern Florida is the Ocala antic line of Tertiary age. This gentle flexure is some 230 miles long and 70 miles wide. The sedimentary formations comprising the flanks of the anticline dip gently away from its crest, the slope becoming less pronounced with successively younger formations. The most recent Pleistocene formations are nearly horizontal. Pleistocene shorelines have been traced as far north as New Jersey, with elevations essentially the same as those in Florida.

It can, therefore, be concluded that no tilting or structural deformation associated with tectonic activity has occurred during the past one-half million years. The closest geologic structure to the north of the site is a gentle, low syncline near Fort Lauderdale, some 50 miles away. The great thickness of Tertiary carbonates indicates that the region has been slowly subsiding for many millions of years. Faults are not common because the strata are undeformed. No fault or structural deformation is known or suspected in the bedrock in the site area.

2.9.3 LOCAL GEOLOGY

The site lies within the coastal lowlands province on the south Florida shelf. The area is practically flat, with elevations rising from sea level at the site to 10 ft above MSL in the Homestead area 9 miles to the west. The predominant surface feature near the site is the Atlantic Coastal Ridge, which represents an area of bedrock outcrop of the Miami oolite. This Pleistocene formation underlies the site, where it is overlain by organic, mangrove swamp soils which average 4 to 8 ft in thickness. Pockets of silt and clay are encountered locally, separating the organic soils and the limestone bedrock.

Local depressions, some of which attain depths as great as 16 feet, are occasionally encountered in the surface of the limestone bedrock at the site. Such depressions are not sinkholes associated with collapse above an underground solution channel, but rather potholes, which are surficial erosion or solution features. These features probably developed during a former period of lower sea level when the rock surface was subjected to weathering and the effects of fresh water.

The Miami oolite, a deposit of highly permeable limestone, extends to about 20 ft below sea level. The rock contains random zones of harder and softer rock and heterogeneously distributed small voids and solution channels, many of which contain secondary deposits. Recrystallized calcite on the surfaces of many of the voids and solution channels is indicative of secondary deposition. This limestone lies unconformably upon the Ft. Thompson formation, which is a complex sequence of limestones and calcareous sandstones.

The upper 5 to 10 ft of the limestone beneath the Miami oolite contains much

coral which may represent the Key Largo formation, a coralline reef rock. This formation is contemporaneous in part with both the Ft. Thompson formation and the Miami oolite.

Prior to deposition of the Miami oolite, the surface of the Ft. Thompson formation was subjected to erosion and weathering. The Miami oolite, therefore, fills in irregular depressions in (lies unconformably upon) the surface of the underlying formation. Much of the Ft. Thompson formation is riddled with small voids and cavities resulting from solution action, and is, therefore, extremely permeable. The results of solution activity evident in both the Miami oolite and Ft. Thompson formations are derived from solution by fresh ground water at a former period of lower sea level.

The Ft. Thompson formation, together with the Miami oolite, comprises the bulk of the Biscayne aquifer, a hydrogeologic unit described in Section 2.10.

At a depth of about 70 ft. below sea level, the Ft. Thompson formation unconformably overlies the Tamiami formation, a predominantly clayey and calcareous marl, locally indurated to limestone. The Tamiami formation also contains beds of silty and shelly sands, and is relatively impermeable. The Tamiami and underlying Hawthorne and Tampa formations, all of which are Miocene in age, comprise a relatively impermeable hydrogeologic unit called the Floridian aquiclude, which is roughly 500 to 700 ft. thick in southern Florida.

Because of their composition, the soils and the rock in the site area have negligible base exchange capacity and, therefore, will not effect any significant ion exchange.

The bedrock beneath the site is competent with respect to foundation conditions and is capable of supporting heavy loads.

The fossil-fueled units (Units 1 & 2) were constructed prior to the nuclear units (Units 3 & 4). During construction of Units 1 & 2, the entire fossil-fueled unit site was demucked and backfilled with crushed limerock fill. The Unit 4 EDG Building is located within the Units 1 & 2 excavation. After demucking, this area was backfilled up to Elevation +5.0 feet above the mean level of water (MLW).

Units 1 and 2 impose heavy loads on limestone and limestone rock fill identical in overall character to that underlying the two nuclear units. The total design load is applied on the foundations of Units 1 and 2 and observed settlements are well below those incorporated for design.

No subsurface conditions were encountered during construction of the nuclear units that materially differed from those presented in the Preliminary Safety Analyses Report. During construction of Units 3 & 4, the building site area was backfilled to the existing grade at elevation 18.0 feet MLW.

2.9.4 SUBSURFACE INVESTIGATION FOR THE UNIT 4 EDG BUILDING

Foundation engineering investigations were performed to evaluate the subsurface conditions in order to determine the most satisfactory foundation system to support the Unit 4 Emergency Diesel Generator (EDG) Building. The investigations consisted of drilling, sampling, field and laboratory testing and engineering analyses.

The results of field explorations and field and laboratory testing programs which provide the basis for the engineering analyses are presented in Reference 1.

This subsection summarizes the results of the subsurface and foundation investigation (Reference 1) specifically conducted for the construction of the Unit 4 EDG Building. Conclusions drawn from this investigation demonstrate the suitability of the site for the safe support of the Unit 4 EDG Building mat foundation.

2.9.4.1 PROPERTIES OF SUBSURFACE MATERIALS

The Seismic Category I Unit 4 EDG Building is founded on a reinforced concrete mat with bottom at Elevation +10.0 feet MLW and supported on compacted limerock fill extending to limestone bedrock (Miami Oolite).

The subsurface soils at the site consist of a limerock fill, sand and silt fill layer, underlain by limerock.

Description	Elevation, ft MLW
Very dense limerock, sand, and silt fill	+18 to - 5
Limestone, sand and silt fill	- 5 to -10
Fossiliferous limerock (Miami Oolite)	-10 to -35

The geophysical survey indicated the following two basic units for the subsurface conditions:

Description	Elevation, ft MLW
Limerock fill	+18 to -10
Miami Oolite	-10 to -35

Exploration

The foundation soil test boring program was developed by Ebasco Services, Inc. and borings were made by Ardaman & Associates of Miami, Florida. The initial Standard Penetration Testing (SPT) boring program consisted of five borings. The site drilling was performed between December 21 and December 29, 1987. A supplementary soil test program consisting of 5 borings was conducted in April 1988. The purpose of this program was to obtain additional information regarding the density of existing fill, verify that no muck exists at the lower levels of the fill, and evaluate the liquefaction potential of the fill. This program is discussed in Reference 1.

Limerock Fill Material

A grain size distribution of a composite sample of limerock fill material was made. Standard Penetration Test samples were combined to create a composite sample. The limerock fill from the samples were classified as light tan silty sand with gravel mixture, SM designation in accordance with the Unified Soil Classified System, ASTM D-2487, Reference 2.

Rock Cores (Miami Oolite)

Five samples were trimmed from the rock cores for unconfined compressive strength determinations. The specific gravity equaled 2.68 and the carbonate content was 96.6%.

A detailed discussion of the test program and the results for both the limerock fill material and the Miami Oolite are presented in Reference 1. See Subsection 2.9.4.4 for in-situ engineering properties including Poisson's ratio, Young's modulus and shear modulus determined by seismic surveys.

2.9.4.2 GEOPHYSICAL SURVEYS

A geophysical testing program was conducted on January 20, 1988. This program is summarized and the results are presented in Subsection 2.9.4.4. The program consisted of a down-hole survey. Both compression and shear wave velocities of the foundation materials were measured at one boring location. These velocities along with the unit weight values of soil and rock determined from laboratory tests were used to compute Poisson's Ratio, Young's modulus and shear modulus of the in-situ materials.

2.9.4.3 EXCAVATIONS AND BACKFILL

Field, geophysical and laboratory data show that the soil on the site at the locations and the depths explored consist, from the ground surface to a depth ranging from 25 to 27 feet, of tan to light tan limerock fill with sand and silt. Underlying the fill material, fossiliferous limestone (Miami Oolite) was encountered to the termination depth of the test borings.

The Unit 4 EDG Building is founded on a reinforced concrete mat with bottom at Elevation +10.0 feet MLW and is supported by existing crushed compacted limerock fill. The limerock fill material is crushed rock, shot rock, or a combination of the two. The static and dynamic engineering properties of these materials are summarized in Subsections 2.9.4.4 and 2.9.4.7.

2.9.4.4 RESPONSE OF SOIL AND ROCK TO DYNAMIC LOADING

The Seismic Category I Unit 4 EDG Building structure is founded on compacted limerock fill extending to limestone bedrock. The seismic design of the Unit 4 EDG Building structure is discussed in Subsection 5.3.4.

A downhole seismic velocity survey was completed on January 20, 1988 in one boring. This seismic survey was carried out to provide information which could be used to augment data collected during the exploratory boring program and to provide estimates of the in-situ engineering properties of foundation materials.

Two surveys were completed and checked against each other. The first survey began at a depth of 41 feet (EL -24.6 feet MLW) and arrival times for compressional and shear waves were recorded at 2-foot intervals up to a depth of 15 feet. A second survey was carried out at 5-foot intervals from a depth of 40 feet (EL -23.6 feet MLW) up to a depth of 5 feet. The results of both surveys were combined to determine the compressional and shear wave velocities for materials beneath the proposed emergency diesel generator building.

On the basis of compressional and shear wave velocities established from the downhole seismic surveys, values for Poisson's ratio, Young's modulus, and Shear modulus were determined. These values are presented below.

Material	Poisson's Ratio	Young's Modulus	Shear Modulus
Limerock Fill	0.256	18.42×10^6 psf	7.38×10^6 psf
Miami Oolite	0.253	46.65×10^6 psf	18.62×10^6 psf

The density of the limerock fill was taken as 125 pcf on the basis of previous studies conducted at the site by Dames and Moore as stated in their report of February, 1967 (Reference 9). The density of the Miami Oolite was taken as 113 pcf on the basis of laboratory tests of samples obtained from the survey boring. Reference 1 provides details of the geophysical test results.

See Subsection 5.3.4 for discussions concerning soil and structure interaction and the design of manholes and ductbanks.

2.9.4.5 LIQUEFACTION POTENTIAL

Liquefaction analysis is based upon the Standard Penetration Test (SPT) data using conservative, standard procedures. The Safe Shutdown Earthquake (SSE) used in the analysis has a peak ground acceleration of 0.15g (see Subsection 2.11.2). Using these criteria, the calculated factor of safety against liquefaction of the fill material is well within safe limits.

A liquefaction analysis was conducted for the area designated for the location of the Unit 4 EDG Building structure. This analysis was based on SPT blow count records from the boring logs in accordance with the procedure first outlined by H. B. Seed et al. (1983), and modified by H. B. Seed et al. (1985) (References 3 and 4).

Liquefaction potential was systematically evaluated for all sand layers below the ground water table with measured SPT blow count values. This evaluation was performed for all borings. Details of this analysis are presented in Reference 1.

The calculated factor of safety against liquefaction of the fill material is greater than 1.1 which indicated that no potential for liquefaction exists at the Unit 4 EDG Building location.

2.9.4.6 EARTHQUAKE DESIGN BASIS

The evaluation of the maximum earthquake potential is presented in Section 2.11. Based on this analysis, the design earthquake (Operating Basis Earthquake, OBE), has been conservatively established as 0.05g horizontal ground acceleration. The Unit 4 EDG Building, including the diesel oil storage facility, and manholes and ductbanks have also been designed for a Safe Shutdown Earthquake, SSE, of 0.15g ground acceleration to assure no loss of function of this vital system. The maximum vertical earthquake ground acceleration is taken as two-thirds of the maximum horizontal ground acceleration.

2.9.4.7 STATIC STABILITY

The Unit 4 EDG Building is founded on a reinforced concrete mat with bottom at EL +10.0 feet MLW and supported by existing crushed limerock fill. The maximum static uniform foundation pressure for the foundation mat is 6000 psf. Soil properties used in the foundation evaluations were determined from the field, geographical and laboratory data.

<u>Bearing Capacity</u>

Bearing capacity is based upon proven and conservative methods using Terzaghi's equation. The computed ultimate bearing capacity of the mat is

70 ksf, which provides a factor of safety of 7.0 for the allowable backfill bearing pressure of 10 ksf. Therefore, the computed allowable capacity was found to be well above the applied loads. A detailed discussion of this subject is provided in Reference 1.

Settlement

Settlement determination is based upon direct measurement of soil elastic modulus obtained by geophysical testing (Swiger Method - Reference 5). Research indicates that this method yields the most realistic and comprehensive determination of settlement.

The settlement computed by using the down hole shear wave velocity values at the Unit 4 EDG Building site is the most accurate representation of the predicted settlement value.

The computed average settlement of the Unit 4 EDG Building structure due to static loading is 0.163 inches. The maximum differential settlement across the mat foundation is about 0.13 inches. In view of the rigid nature of the Unit 4 EDG Building foundation concrete mat, this settlement is acceptable. These calculated settlements are within acceptable limits from a safety of operations standpoint. A detailed discussion of this subject is provided in Reference 1.

2.9.4.8 DESIGN CRITERIA

Design of mats on elastic foundations require determination of the modulus of subgrade reaction. Based on the average settlements obtained using the geophysical properties and the "SETTLG" computer program, the modulus was calculated from the following equation:

$$K_b = \frac{P}{\Delta Havg} \qquad \text{(Reference 6)}$$

where;

K_b = Coefficient of subgrade reaction for foundation of width b

P = Contact pressure (stress units)

$\Delta Havg$ = Average computed settlement of the mat

The computed value of modulus of subgrade reaction is 185 pci.

2.9.4.9 TECHNIQUES TO IMPROVE SUBSURFACE CONDITIONS

No improvements of subsurface conditions were required for the Unit 4 EDG Building structure.

2.9.5 REFERENCES

1. Ebasco Services Inc. Report No. FLO 53-20E.5009, "Turkey Point Units 3 and 4 EDG Enhancement Geotechnical Investigations and Foundation Analysis for Diesel Building Addition", Rev. 0, August 1988.

2. ASTM Standard D-2487 (1985), "Unified Soil Classification System".

3. Seed, H.B., Idriss, I.M., and Arango, I. (1983), "Evaluation of Liquefaction Potential Using Field Performance Data", J. Geotech. Engg. Div., ASCE 109(3), 458-482.

4. Seed, H.B., Tokimatsu, K., Harder, L., and Chung, R.M. (1985), "Influence of SPT Procedures in Soil Liquefaction Resistance Evaluations", J. Geotech, Engg. Div., ASCE III (12), 1425-1445.

5. Swiger, W.F. (1974), "Evaluation of Soil Moduli", Analysis and Design in Geotechnical Engineering, ASCE Proceeding Vol. II.

6. Foundations and Earth Structures (1982). Design Manual DM7, NAVFAC, Department of the Navy, Alexandria, Virginia.

2.10 GROUND WATER

The information in this section pertains to studies conducted of the ground water and geological features at Turkey Point Units 3 and 4 at the time of construction. This information is for historical purposes only.

2.10.1 INTRODUCTION

A study of the ground water hydrology of the site has been completed. This study included review of geology and ground-water reports, review of water level data and historic ground-water conditions, and discussions with ground-water geologists who have worked in the area. Field studies completed at the site included installation of 5 sets of 3 observation wells, which were cased and cemented at 3 different depths at each location, measurement of water levels and tidal response, a pumping test, and injection of dye to evaluate the depth, direction, and rate of groundwater flow. Laboratory studies included salinity and conductivity measurements.

2.10.2 REGIONAL

A large part of southeastern Florida is underlain by the Biscayne aquifer, which furnishes the majority of agricultural, industrial, and municipal fresh water supplies. The aquifer is a hydrogeologic unit which occurs at or close to the ground surface and extends to a depth of 70 ft at the site. The highly porous and permeable limestone formations comprising this aquifer are described in more detail in Section 2.9. The rock consists essentially of oolitic, crystalline and sandy, fossiliferous limestone and coral deposits with random hard and soft layers. The high permeability derives primarily from the numerous small voids and solution channels which are heterogeneously distributed through the aquifer. Some of the voids and channels in the rock are filled with detritus and secondary deposits.

Shallow water table conditions prevail in the area, and the aquifer is unconfined except for a thin (4 to 6 ft) layer of organic soils in the coastal swamp areas. The Biscayne aquifer is underlain by 500 to 700 ft of less permeable limestone, marl, and sandstone strata which comprise the aquiclude overlying the deeper artesian Floridan aquifer. The artesian head in this deeper aquifer is approximately +20 ft MSL at the site. The deep aquifer is not significant in this study except that the positive artesian pressure prevents downward percolation of shallow ground water from the Biscayne aquifer.

Southeastern Florida is a water conservation area extending south and east from Lake Okeechobee. The conservation area consists of large inland areas divided by dikes constructed for the purpose of storing fresh water which otherwise would be wasted by discharge through numerous drainage canals. The water control project and the high permeability and infiltration characteristics of the Biscayne aquifer, together with the highly interconnected surface and ground water flow system, allow excellent control and almost complete management of the water resources of the area.

Ground water levels and the direction and rate of ground water flow in the Biscayne aquifer are products of the topography, rainfall and recharge, hydraulic gradients, canals and drainage channels, ground water use and the hydrologic properties of the aquifer.

Under normal conditions, the water table is near the ground surface, the hydraulic gradient is extremely flat and the ground water moves very slowly (estimated to be about 2,000 ft per year for a hydraulic gradient of 1 ft per mile) toward Biscayne Bay. The flat gradients and directions of ground water flow are consonant with the topography. Most of the water that recharges the Biscayne aquifer is supplied by local rainfall. The amount of annual rainfall varies within relatively short distances. Of the 60 inches of average annual rainfall in the coastal ridge area of Dade County, it is estimated that about 22 inches is discharged by evapotranspiration and surface run off without reaching the water table, and 38 inches reaches the water table. Of this 38 inches, about 20 inches is discharged as ground water flow, and, 18 inches is discharged by evapotranspiration of ground water and by pumping from wells. The magnitude of ground water fluctuations in Dade County varies from 2 to 8 ft in any one year, depending upon the amount and distribution of rainfall in the area. Because of the thin soil cover and very high permeability of the aquifer, recharge to the shallow ground water table from rainfall is extremely rapid.

During periods of extended drought, when recharge is not sufficient to balance evapotranspiration losses, the ground water table in inland areas may be locally depressed below sea level, resulting in reverse direction of ground water flow. Records for a well located about 4 miles southwest of Florida City show that in 7 years out of the 14 years that were studied, the water level has for short periods approached, and at times gone below, sea level. Such conditions, if maintained, would lead to slow inland migration of safe water. However, although the salt water moves inland at depth in the aquifer under low water table conditions, the rate of advance, owing to the extremely low gradient causing encroachment, is so slow that the total advance of the salt water front during 3 or 4 months of extremely low water table conditions is not likely to exceed several hundred feet. As the water table rises (a result of recharge from rainfall), the rate of advance is decreased, and if recharge continues, the advance of the salt-water front will be stopped; if high water-table conditions are maintained for several months, the salt-water front may be flushed seaward beyond its original position.

Salt-water intrusion has resulted from tidal and storm wave inundation along the coast, leakage from formerly uncontrolled canals which allowed inland migration of salt water, droughts, density variations between salt and fresh ground water, and withdrawal by pumping. At the present time, in the vicinity of the site, the 1,000 ppm isochlor at the base of the Biscayne aquifer is located approximately 4 to 6 miles from the coast. Salinity is generally less in the higher part of the aquifer, suggesting density stratification.

Water sufficiently fresh for irrigation purposes is available from wells located west and northwest of the site. The nearest of these wells is about 3-1/2 miles from the site. The cities of Homestead, Florida City, and Key West derive their ground-water supplies from well fields in the vicinity of Homestead and Florida City. Potable water for the plant is obtained through a pipeline from Rex Utilities, Inc., a private concern 9-1/2 miles distant, which also serves Leisure City near Homestead. The water is obtained from the Biscayne aquifer.

2.10.3 LOCAL

The site is located in an area of shallow, extremely permeable, limestone bedrock, with a very high water table. Because the natural ground elevations at the site are generally less than 1 ft. above MSL and the normal tide range in Biscayne Bay averages 2 ft., the site is subject to tidal inundation. At the site, the Biscayne aquifer is overlain by a shallow deposit, approximately 5 ft. thick, of organic swamp soils. The base of the aquifer is at a depth of approximately 70 ft. below sea level, where it is underlain by less permeable limestone and sandstone strata.

Because of tidal inundation, the ground water and surface water at and in the vicinity of the site are highly saline. The water table responds very rapidly to rainfall and tidal fluctuations. Observations of water level fluctuations in selected observation holes and hydrologic holes located approximately 1,300 to 2,900 ft. from the shore, show that the water level rises and falls in accordance with tidal variations, but with an approximate 25 percent to 50 percent head loss and a 2 to 3 hour time delay.

Dye studies to evaluate the rate, direction, and depth of ground water flow at the site indicate that the lateral movement of ground water at the site is very slow. No dye appeared in observation wells within 140 ft. of the injection point even 23 days after injection. Observation of suspended matter by means of a downhole TV camera showed no sign of any lateral movement of ground water.

2.11 SEISMOLOGY

2.11.1 INTRODUCTION

Records of the earthquake history of southeastern United States and Cuba have been used to develop estimates of the maximum expected and maximum hypothetical earthquakes which could affect the site. All recorded earthquakes felt in Florida have been plotted and considered in the analysis.

2.11.2 EARTHQUAKES

Records show that there have been no more than 7 shocks in the past 200 to 250 years with epicenters located in Florida. Two of these had epicentral intensities of no more than VI (Modified Mercali). Neither of these was felt in southern Florida. Five others were exceedingly small and may have been caused by explosions or submarine slides rather than earthquakes. Other shocks have had epicenters in Cuba. The closest to southern Florida was approximately 250 miles to the south at San Cristobal, Cuba. The largest shock nearest the area was the Charleston, South Carolina earthquake in 1886, with an epicentral intensity of X (Modified Mercali).

On the basis of historical or statistical seismic activity, Turkey Point is located in a seismically inactive area, far from any recorded damaging shocks. Even though several of the larger historical earthquakes may have been felt in southern Florida, the amount of ground motion caused by them was not great enough to cause damage to any moderately well built structure. The Uniform Building Code (1964 edition, Volume 1, as approved by the International Conference of Building Officials) designates the area as Zone 0 on the map entitled "Map of the United States Showing Zones of Approximately Equal Seismic Probability."

Limestone bedrock is at or near the ground surface at the site. The site area is far from any folded or deformed sediments, and surface faults are unknown.

Predicated on history, building codes (which do not require consideration of seismic loading), geologic conditions, and earthquake probability, the design earthquake has been conservatively established as 0.05 g horizontal ground acceleration. The nuclear units have also been checked for a 0.15 g ground acceleration to assure no loss of function of the vital systems and structures. Vertical acceleration is taken as 2/3 of the horizontal value and is considered to act concurrently.

2.12 ENVIRONMENTAL MONITORING

2.12.1 GENERAL

The environmental monitoring program is designed to accomplish two objectives.

The first objective was to determine the existing level of background radioactivity resulting from natural occurrence and global fallout in the Turkey Point Plant environs before radioactive materials are delivered to the site. This preoperational phase began approximately one year before nuclear fuel was received at the site and continued until the first nuclear reactor went critical.

The type, frequency, and location of samples included in the preoperational environmental monitoring program were selected on the basis of population density and distribution, agricultural practices, sources of public water and food sources, industrial activities, recreational and fishing activities in the area. In addition, the natural features of the environment including meteorology, topography, geology, hydrology, hydrography, pedology, and natural vegetative cover of the area were also considered. Accessibility within the area and the necessity for protecting the sampling equipment from vandalism limited the choice of available sampling sites.

In the design of the preoperational monitoring program, various factors were studied in the preliminary evaluation of available or possible exposure pathways including: (1) method or mode of radionuclide release, (2) estimated isotopes, (3) activity, (4) chemical and physical form of radionuclides which may be expected from the operation of the facility.

During the preoperational phase, procedures were established, methods and techniques were developed and a continuing review of the program made to verify the suitability and adequacy of the environmental monitoring program. See Figure 2.12-1.

The second objective of the environmental monitoring program is to determine the effect of the operation of the nuclear units on the environment. This operational phase began with initial criticality, startup and subsequent operation of units 3 and 4, and is essentially a continuation of the preoperational program.

Significant quantities of radioactive materials should not be released to the environment during the operation of the nuclear units and the monitoring program is designed to demonstrate this. The sampling and analysis program is described in the Offsite Dose Calculation Manual (ODCM) in accordance with the plant Technical Specifications.

2.12.2 AIR ENVIRONMENT

The air environmental monitoring program was designed to determine existing natural background radioactivity and to detect changes in radiation levels in the air environment which may be attributed to the operation of the nuclear units.

2.12.3 WATER ENVIRONMENT

The water environmental monitoring program was designed to determine existing natural background radioactivity and to detect changes in radiation levels which may be attributed to the operations of the nuclear units.

In the preliminary assessment of exposure pathways in the Water Environmental Program, it was apparent that drinking water was not the critical exposure pathway because Biscayne Bay water is essentially sea water. Investigation was directed to other pathways that may be steps in the food chain to man since it is known that certain species of aquatic biota, inherently or by means of aquatic food sources, may concentrate specific radionuclides several times above the equilibrium concentration of radionuclides in the water environment.

2.12.4 LAND ENVIRONMENT

In the land environmental monitoring program, as in the water monitoring program, the program was designed to determine existing natural background radioactivity and to detect changes in radiation levels in the land environment which may be attributed to the operation of the nuclear units.

In the preliminary assessment of exposure pathways in the land environmental program, milk was not the critical pathway because there are no dairy herds within 25 miles of the facility. Other exposure pathways which may be steps in the food chain to man were investigated, including fruit and vegetable crops which may be grown in the vicinity of the facility. Radionuclides are present in soil as background radioactivity and may be incorporated into plant life.

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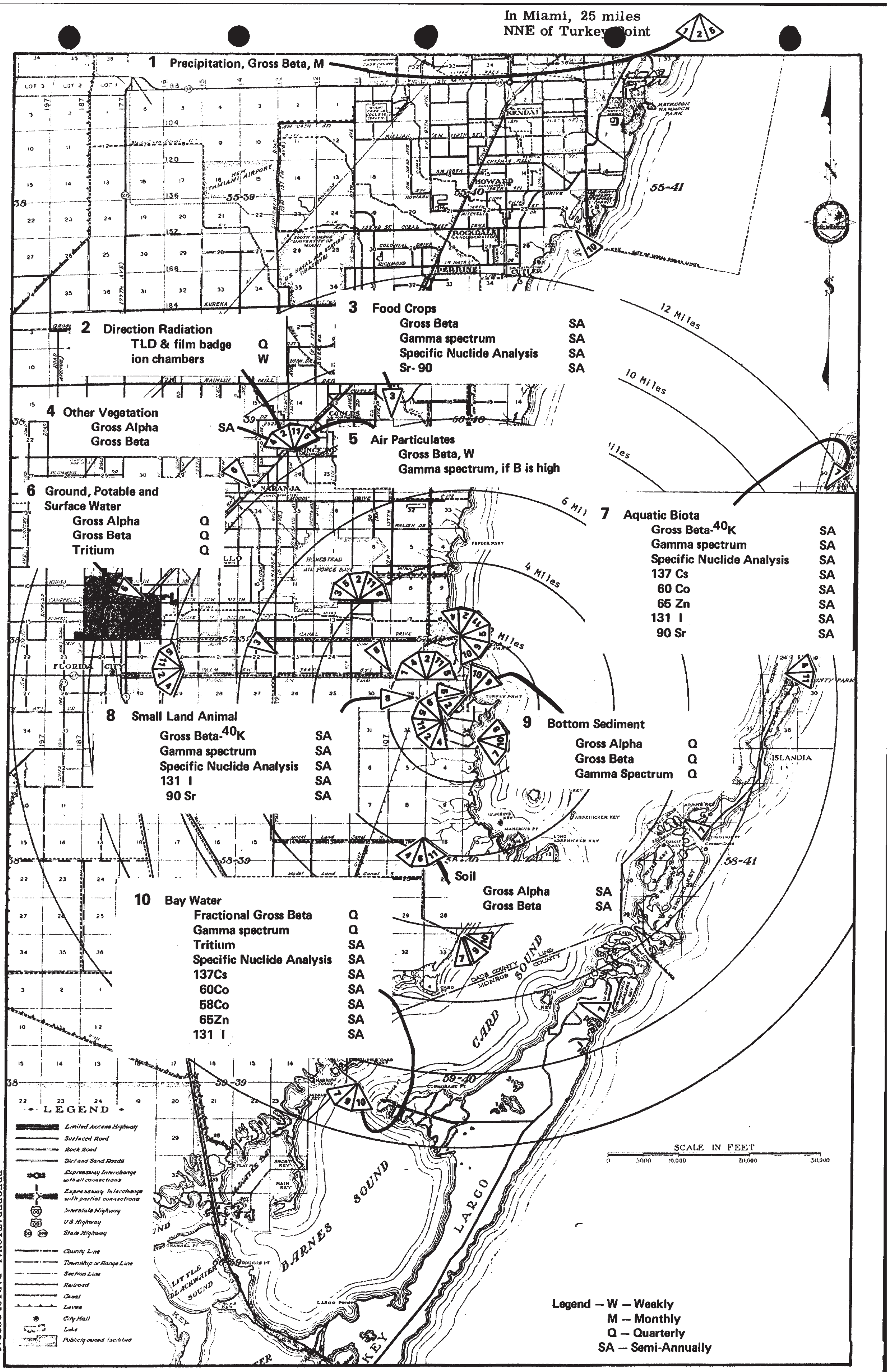


PREOPERATIONAL RADIOLOGICAL SURVEILLANCE PROGRAM

FIG. 2.12-1

2.13 EXCLUSION ZONE - LOW POPULATION ZONE

2.13.1 EXCLUSION ZONE

On the basis of meteorological data presented in Section 2.6, Appendices 2A and 2D, and the analysis of the consequences of a postulated release of fission products set forth in Section 14.3.5 and Appendix 14F, the exclusion zone is included within the property boundary line. As shown on the property plan, the minimum exclusion distance is 4164 feet to the north property line. The minimum distance to the south property line is 5582 feet. The exclusion radius as identified in Appendix 14F is 4164 feet which is bounded by the exclusion zone. The exclusion zone is identified as the area within the property boundary line.

Within the exclusion zone there are: (1) two fossil fuel electric generating units staffed by approximately 65 FP&L employees, (2) a Scout camp used intermittently by about 20 people, (3) a picnic area used intermittently, that has been used by as many as about 1500 persons (during a local organization's picnic), (4) an Air Force Sea Survival School with class visits of perhaps two dozen military personnel.

2.13.2 LOW POPULATION ZONE

The low population area is enclosed by a circle of 5-mile radius. The area includes Homestead Bayfront Park and farmland to the north, a portion of Homestead Air Force Reserve Base to the northwest, the Turkey Point elementary school, farmland to the west and undeveloped swampland to the southwest and south (refer to Figure 2.2-2). There are no permanent residents in the area at the present time (refer to Tables 2.4-1 and 2.4-2). Additionally, population projections through the year 2013, as presented in Tables 2.4-13 through 2.4-16, indicate that this area will remain uninhabited by permanent residents for the remaining plant operating period authorized in the Turkey Point Units 3 and 4 Operating Licenses.

It should be noted that the land within this area is low and is periodically subject to hurricane flooding. Development has traditionally taken place in the more elevated areas to the west. While it can be said that there is some pressure to develop areas having Biscayne Bay frontage, two factors are present as a deterrent to such development. The western boundary of Biscayne National Monument coincides with the western shore of Biscayne Bay for almost 4 miles south of the plant. There is strong local sentiment against bayshore development which might impair the values of the monument or which would deny the bayfront to general public use. Secondly, land adjoining the bayfront is overlain with a five or six-foot deep layer of organic peat or "muck" as it is known locally. This material is unsuitable for the foundation of structures, consequently the cost of any development is extremely high.

Transient population in the low population zone is principally confined to visitors to the Homestead Bayfront Park. The maximum number of persons expected to visit the Park is 10,000 which would be for the 4th of July. Since the only available estimates are for total daily visitors, the number present in the Park at any one time would be less than this amount. Likewise the figure can be compared to the normal weekend day of 5000 visitors and the normal weekday of 1000 visitors.

Monroe County and Dade County Emergency Response Directors, the State Department of Health, Bureau of Radiation Control, and the State Division of Emergency Management are responsible for determining and implementing protective measures in offsite areas. (Turkey Point Radiological Emergency Plan Section 5.2.1).

The Park is served by two roads, one on each side of North Canal. It is reasonable to assume that cars can be evacuated at the rate of about 1650 cars per hour. Thus 5000 cars could be evacuated over one road in about three hours.

The low population zone is served by several hard surfaced roads. Tallahassee Road and South Allapattah-East Allapattah Road provide access to the area from the north around the west and east sides of the Homestead Air Force Reserve Base respectively. Tallahassee Road also provides access to the south via

Card Sound Road and Key Largo. Palm Drive, North Canal Drive and Mowry Drive all provide access to the area from the west. On the basis of the paucity of population, the existence of several hard surfaced roads, and the analysis set forth in Section 14.3.5, it is concluded that the proposed low population zone meets the criteria set forth in 10CFR100.

APPENDIX 2A

MICROMETEOROLOGICAL ANALYSIS

(516) 265-0623

LESTER A. COHEN

METEOROLOGIST - AIR POLLUTION CONSULTANT

3 EXECUTIVE DRIVE

HAUPPAGE, NEW YORK 11787

March 28, 1969

Mr. Robert J. Gardner
Executive Assistant
Florida Power & Light Company
P. O. Box 3100
Miami, Florida 33101

Dear Mr. Gardner:

Enclosed is the micrometeorological analysis for Turkey Point for inclusion in the FSAR, Mr. Frizzola collaborated with me in the analysis and preparation of the report.

Very truly yours,

SIGNATURE

Lester A. Cohen

Micrometeorological Analysis
Turkey Point, Florida
Florida Power and Light Company

Summary

A diffusion climatology was developed from meteorological data collected at the Turkey Point site during 1968. Analysis of the data aided in ascertaining the predominant meteorological parameters affecting the dispersion of effluents at the site. Unobstructed flat terrain, strong wind speeds and a high percentage of unstable lapse rates provide a favorable regime for atmospheric dispersion.

Characterized by wind direction variation and vertical temperature gradient the two predominant turbulence categories are the unstable and stable classes. These regimes account for 96 per cent of the annual occurrences (66 unstable, 30 stable), the other 4 per cent limited to high wind conditions or very light winds. In reference to the onshore sector (defined as 030 to 210 degrees, clockwise) unstable conditions account for 50 per cent and stable 19 per cent. Wind speeds at the 235 foot elevation average 10 and 13 mph for the respective stable and unstable cases. The number of observed calms totaled 34 for the 30 foot elevation and 23 for the 235 foot elevation. Hourly variations in the mean wind direction were small, high steadiness or constancy values extended to time intervals of at least one day. The relatively small daily, seasonal and annual meteorological variations result in a consistent diffusion capability for the site.

Source of Data

During the latter part of 1967 a complete onsite meteorological data acquisition program was operational. Meteorological instrumentation included wind and temperature sensors located within the layer ground level to 235 foot elevation. The instrumentation is adequate to define the representative dispersion parameters at the site. Included in the meteorological monitoring system were the following:

1. Wind sensors - Bendix Friez Aerovanes equipped with six-blade propellers, mounted at 30 feet MSL near the Ranger House and at 235 feet MSL atop the water tower (note: the water tower no longer exists).

2. Temperature sensors - shielded, air aspirated resistance thermometers mounted on the water tower structure (note: the water tower no longer exists) at elevations of 32, 132 and 232 feet MSL.

3. Precipitation - standard U.S. Weather Bureau weighing type rain gauge. Rainfall amounts recorded on a drum chart.

4. Atmospheric pressure - hourly readings taken on a Fortin-type mercurial barometer.

5. Relative humidity - hair hygrometer sensor, humidity continuously recorded on a drum chart.

All of the instrumentation selected is durable and representative for hourly average values. The sensors were calibrated prior to installation and routinely checked for accuracy. Data continuously recorded on charts were manually reduced from the analog form to mean hourly digital values and entered on computer cards for analysis.

All the data were personally edited before use in the final computer analyses.

Topography

Complete uniformity of the surrounding terrain, less than 10 feet MSL in all directions, and the proximity to the sea provide an adequate fetch for the meteorological sensors. This homogeneity insures that the observations are representative of the area. Significant influences from topographical features can be neglected.

Aerodynamic Effects on Instrumentation

The Aerovane wind sensors located at the Turkey Point site are mounted on the eastern side of the nearest building or supporting structure. This exposure provides an unobstructed fetch toward the prevailing easterly onshore flow. A low level Aerovane, approximately 30 feet in elevation, is mounted vertically atop a utility pole, two feet southeast of the Ranger house. The vertical displacement of the sensor, being over 20 feet above the Ranger house roof, is of sufficient height to eliminate any aerodynamic influences for onshore flow. Visual analysis of the analog traces illustrates that offshore flow is affected by the Ranger house causing an increase in the direction range and a slight reduction in wind speed. The magnitude of the aerodynamic turbulence is not significant and is not considered a primary factor in the wind records' accuracy. Any effects would be on the conservative side as the recorded wind speed would be lower than the true speed. Mean wind direction data are not significantly altered from the prevailing flow as is evident from the high correlation between the low level and high level Aerovanes.

Similar investigation of the high level (235 ft) Aerovane, mounted on a vertical mast 17 feet above the top of the smooth hemispherical dome shaped water tower tank, indicates undistorted traces of the direction for onshore flow. This Aerovane is located on the eastern side of the tank and is approximately 50 feet higher than any existing or proposed large structure, exclusive of the present stacks (417 ft) serving Units 1 and 2.

Offshore flow, or those directions from west through northwest, display an increase of mechanical turbulence generated by the proximity of the surrounding structures. Aerodynamic aberrations are evident in the azimuth data analysis illustrating the marked increase of direction range when the wind is from 260 clockwise to 325 degrees. The structures for Units 1 and 2 being directly upwind of the Aerovane, for these directions, account for the increase of the azimuth range. This effect is conservative as the Aerovane is responding to the characteristic flow in the vicinity of the structures which is causing the wind speed to record lower than if there were no obstacles upwind of the sensor. The turbulent eddies create an increased oscillation in the azimuth which does not permit the Aerovane to face directly into the wind, thus the attack angle is not permitting the sensor to record the full magnitude of the wind speed. However, the mean

directions are representative of the prevailing flow at the site. Analysis of the direction ranges with the simultaneous recorded temperature lapse rates
indicate the correlation of the data is consistent with turbulence classes observed at other sites (1, 14). Analog analyses illustrate the wind sensors are adequately describing the representative flow at the site. The aerodynamic turbulence effects are only evident in offshore flow, onshore flow is undistorted.

The principles of aerodynamic effects relating to the above discussion are given in Reference 20.

Turbulence Classification

For dispersion climatology use of a single parameter, incorporating the characteristics of wind direction trace and vertical temperature gradients, aid in assessing the various turbulence regimes. Average ranges of the 235 foot wind direction fluctuations [1,2] permit classification of the turbulence states into the following four categories:

Class 1 - light winds, strong thermal instability, direction range exceeds 90 degrees.
Class 2 - moderate winds, moderate thermal instability, direction range less than 90 degrees, typical unstable daytime regime.
Class 3 - moderate to strong winds, moderate stability, direction range less than 40 degrees, associated with mechanical turbulence.
Class 4 - light to moderate winds, moderate to strong stability, direction range less than 15 degrees, representative of nocturnal regime, low turbulence level.

The most frequent categories at Turkey Point are classes 2 and 4 as shown in Table 1. Class 2 accounts for 66 per cent of the total for the year, while 30 per cent occur during class 4. Predominance of class 2 is attributed to the large number of daytime hours with strong incoming solar radiation. Also, the proximity to the ocean results in observations of class 2 into the evening hours, particularly with respect to the characteristics of the wind direction trace. Class 4 is representative of nocturnal stable conditions and is in good agreement with climatological estimates for the area [3]. The neutral class 3 category consists of a small percentage, predominant during periods of cyclonic activity. Very unstable lapse rates with light winds are negligible at the site, seen by the small percentage of class 1. The overall turbulence classes can be condensed into two broad categories, unstable (including classes 1-3) and stable (class 4). Percentages for these categories account for 70 and 30 per cent respectively. Of particular interest is the percentage of turbulence classes for onshore winds (030 clockwise to 210 degrees). Table 2 shows the overall percentage of 71 per cent onshore winds, 50 per cent unstable and 19 per cent stable. Wind speeds associated with the four turbulence classes are illustrated in Table 3. Annual mean speeds are 10 mph for stable and 13 mph for unstable classes at the 235 foot level.

Lapse Rate Distributions

Figures 1 through 12 show the mean monthly diurnal temperature differences between the 232 and 32 foot levels. The dashed line represents the dry adiabatic lapse rate for the 200 foot interval of -1.1°F. During the colder months, December through February, lapse rates have a smaller portion of unstable compared to stable gradients. The greater stability is observed in nighttime hours resulting from the dominance of dry cool air masses favoring radiative cooling. Strong incoming solar radiation, increasing from March through August, is shown by the larger percentage of unstable gradients which are also prevalent in the other months. The predominance of onshore flow results in a slightly decreased instability along with correspondingly less intense stable conditions during the evening.

Table 4 illustrates the prevalence of unstable temperature gradients (56 per cent). Transition lapse rates incorporate the neutral through slightly stable conditions accounting for the remaining 44 per cent. The monthly frequency of hourly temperatures at the 32 foot level is shown in Table 5 with the greatest range found during the winter season. Percentages obtained from the characteristics of the wind direction trace (66 per cent for class 2) are in good agreement with the temperature gradient measurements. Tables 6-8 show the lapse rates and wind speeds associated with the individual turbulence classes, further confirming the representativeness of the turbulence classification as a general indicator of the dispersion characteristics. During stable conditions higher wind speeds are found with the more intense inversions. Moderate to strong speeds are evident in the unstable and neutral cases.

Precipitation

The number of hourly occurrences of rainfall for various class intervals is shown in Table 9. Total rainfall for the year was 78.10 inches with the typical rainy season extending from May to October.

Wind Speed Distributions

Percentage frequencies of the wind speed, in the standard ESSA speed classes, and the mean monthly speeds are illustrated in Tables 10 and 11 for the 30 and 235 foot elevations respectively. The 0-3 mph class comprise a very small percentage of occurrence and the overall percentage of calms for either level amounts to less than

0.4 per cent annually as seen in Table 12. Average annual wind speeds at 30 and 235 feet were 9 and 13 mph respectively. Mean wind speeds at the 30 and 235 foot elevations are 5 and 10 mph for stable (class 4), 10 and 13 mph for the unstable (class 2) conditions.

Wind Direction Distributions

The percentage frequency of the monthly wind directions is shown in Figures 13 through 24 with the annual wind rose in Figure 25. Onshore wind directions are dominant, with the easterly (050 to 150 degrees) sector showing the highest occurrence. Minor peaks in northerly directions are present from December through February reflecting the polar outbreaks. Diurnal variation in the wind direction, particularly for onshore winds, is quite small as seen in Figures 26 and 27 and summarized by months in Table 13. The percentage of day and night onshore winds is about equal. A distinct sea breeze regime [4,5] in the standard sense would cause a marked difference in diurnal wind directions. The regime present at the Turkey Point site is typical of a monsoonal ocean breeze having little diurnal direction variation. A reduction in the intensity of wind speed at night is shown on the speed class distributions for the day and night wind roses.

The annual wind direction frequency for turbulence classes 2 and 4 are shown in Figures 28 and 29 further indicating the large percentage of unstable conditions with onshore winds. Correlations of the wind direction between the 30 and 235 foot levels indicate no significant differences for the various stability classes. Wind directions are representative of the area and are constant within the surface to

235 foot layer.

Constancy

The steadiness or persistence of the wind is defined as the ratio of the mean vector wind to the mean scalar wind. This concept is extended to the variation of steadiness with mean wind direction range over various averaging intervals [6]. A steadiness value of one indicates an invariant direction over the time interval of interest and a value of zero describes a completely symmetrical distribution. Changes in the steadiness of 0.1 represent a deviation in direction of 18 degrees. Generally with high wind speeds the direction change with increasing time is relatively slow. High values of steadiness over extended time scales are indicative of favorable dispersion conditions, the higher winds associated with greater mechanical mixing in the atmosphere. Evaluation of the steadiness for time intervals ranging from two hours to thirty days is made to ascertain the most probable areas of high recurrence in sector size and direction. Figure 30 illustrates the most frequent values of the steadiness over various averaging times. The direction range remains low for periods up to two days, then gradually decreasing through the thirty day period. The highest or extreme values of the steadiness for each month was analyzed by time intervals (2,4,8,16 and 30 days) using extreme value statistics [7]. Table 14 shows the systematic decrease as the time interval increases. Data from West Palm Beach, Florida for a different year (1964) are also shown with the similarity in values evident through the eight day period. A theoretical regression line was obtained from the data and a value of 0.9 (18 degree sector) was chosen as a design criterion for illustrative purposes. The return period or recurrence interval for this value is shown in Table 15. For example, the hourly average wind direction will remain in an 18 degree sector from an easterly direction for four consecutive days once every 23 months; with a probability of 66 per cent that this return period (23 months) is found between 7 and 70 months. Also noted is the small change in return period for the 4 to 16 day class. The analysis indicates the high constant nature of the direction and velocity at the site for long time periods.

Atmospheric Diffusion

Proximity of the site to the seacoast requires consideration due to the characteristics of the different underlying surfaces affecting diffusion rates [8]. Due to the large percentage of unstable meteorological conditions and small differences in the land-sea temperature gradient, rapid changes are not to be expected in dispersion conditions regarding onshore or offshore flow. Onshore flow during daytime hours would create greater dispersion as the convective turbulence increases with the air proceeding inland. Observations of onshore winds from Cape Kennedy [9] show the standard deviation of horizontal direction fluctuations increasing by a factor of 1.4 for a site three miles inland compared to the coastal site. Offshore directions had a larger standard deviation in the direction, due to the ground roughness causing an increase of mechanical turbulence.

During periods of offshore flow when the air would be warmer than the ocean, it would be cooled from below and stabilized [5]. Data illustrate the small land-sea temperature difference (Table 5) throughout the year which lends the probability of occurrence to be extremely small. Also, offshore winds are not predominant in the warm months when the land surface is warmer than the sea surface. Conversely, offshore flow with air cooler than the ocean, predominant in the winter, heating from below would create greater convective instability enhancing diffusion rates over the water. Onshore flow during nighttime hours would probably show an increase of stability as the air travels inland. Effluents released at the 235 foot elevation during stable conditions would remain aloft until daytime instability mixes it within the surface layer.

Diffusion Estimates

Average values of wind speed and vertical temperature gradients collected at the site are used to estimate the representative standard deviations of the vertical and horizontal wind directions [10]. Table 16 lists the average values of the meteorological parameters for the site. Values of the exponent in the power law wind profile are smaller than estimates in other areas [11, 12] accounted for by the large percentage of cases during convective turbulence. Computed horizontal and vertical standard deviations are within the magnitude of other investigations [13, 14].

In order to determine the plume dimensions as a function of downwind distance, empirical relations between plume dimensions and turbulence parameters, inferred from the actual observations, are used [15]. Values chosen for the lateral turbulence parameter, σ_a, were 10 and 3 degrees for Class 2 and 4 respectively at the 235 foot elevation. Estimates are in good agreement with values from other sites with similar characteristics as Turkey Point [9, 16]. Cape Kennedy data, previously mentioned, indicated an average value of 15 degrees for the horizontal standard deviation at the 12 foot elevation. Since this component normally decreases with height, over homogeneous terrain, the Turkey Point derived value of 10 degrees is quite reasonable. In addition estimates using the ratio of the temperature gradient and the wind speed squared (values in Table 16) are within the same magnitude. Vertical components were derived from methods suggested in [15]. Values are compatible with the general Pasquill classification [17, 18]. A definite similarity exists in the class A-B and class F for the unstable and stable regimes respectively. Corresponding annual average wind speeds, at 30 and 235 feet, associated with the turbulence classes were 5 and 10 mph for stable, 10 and 13 mph for unstable conditions respectively. The representative plume dimensions for the 235 foot level at Turkey Point are listed in Table 17. Equations 1 and 2 represent the stable case (class 4), while the unstable case (classes 1-3) is represented by equations 3 and 4.

Equations based on the Gaussian plume model [19] for prediction of downwind ground level concentrations from continuous point sources are listed in Appendix B. Short term releases, from ground level and elevated sources, of several hours are calculated from equations 5 and 7. Long term releases are functions of the frequency of the wind directions in predetermined sectors as represented by equation 6 for ground level releases.

A conservative approach for the diffusion parameters at the 30 foot elevation is to use the diffusion parameters derived for the 235 foot level The equations for obtaining the diffusion parameters for the higher elevation are given in Table 17. Since the standard deviations of the plume increase with decreasing height (15), the diffusion parameters at the 30 foot elevation would actually have larger values than those calculated using the equations in Table 17. Additionally, no consideration is made of any increased dilution at the lower level from the aerodynamic influences of the structures in the area. The unstable case is analogous to the Pasquill Type D stability, the stable case to Pasquill Type F. An additional factor to consider during onshore flow is the transition of the underlying surfaces affecting the diffusion process. The proximity of the site to the ocean would modify the characteristics of the air mass as the air proceeds inland. This modification would cause the Pasquill Type D to change to a Pasquill Type C-D.

For both the 2-hour and 31 day periods, reference should be made to Section 14.3.5 for the accident meteorological models. For the 2 hour case, the product of σy and σz for the Pasquill Type F condition was used to obtain the dilution factor (X/Q). Using the diffusion parameters as derived from Table 17, the product of σy σz is calculated to be 750 m^2 at the north boundary. This compares extremely well with the value of 770 m^2 as determined from reading the curves of Hilsmeier and Gifford, Reference 4 on page 14.3.5-10. Therefore, the sigma parameters as established from the site data are essentially identical to those used in the calculation of the 2-hour accident model.

For the 31-day period, the value obtained using the diffusion parameters

given in Table 17 leads to essentially identical numbers at the north boundary as is obtained when the parameters derived from Hilsmeier and Gifford are employed. Again, the sigma parameters from the site data give results that are essentially identical to that used in calculating the 31 day accident model.

However, since the parameters obtained from Table 17 have been shown to be conservative since they are for higher elevation conditions, the model parameters are conservative.

Incorporating the meteorological parameters into diffusion equations, gives the typical centerline concentrations at ground level for unstable and stable cases as illustrated in Figure 31. Long term releases occurring in a twenty degree sector from the site, assuming a one per cent frequency of occurrence, are seen in Figure 32. In both figures the source strength is one unit per second. The high values for the stable cases in the long term concentrations are accounted for by the spreading of a relatively small plume, with high concentrations in the short term, over a twenty degree sector width.

An annual pattern of the long term concentration was computed for the unstable and stable cases using the observed frequency of wind occurrence in each ten degree sector. Isopleths of the normalized ground level concentrations resulting from a ground release are illustrated in Figures 33 and 34. The highest values are found in the westerly sections due to the predominant easterly winds. Maximum values occur at a distance of 1 kilometer for both cases in the sector almost west of the site.

Routine releases from an elevated source, with high wind speeds, would definitely reduce the magnitude of the concentrations at the ground in the unstable case. Stable cases would not contribute to the ground level concentrations since the plume would remain aloft. Prevailing air flows can be ascertained from the 235 foot Aerovane for elevated releases.

The meteorological data acquisition program will continue and data further analyzed to justify the turbulence parameters chosen for the site. Data evaluated to date appear quite consistent with other micrometeorological investigations along the Florida east coast [9, 16].

Routine Elevated Releases

Figures 35 and 36 illustrate the normalized ground level concentrations along the centerline, release height of 73 meters, for the unstable and stable cases. Evident is the increased dilution attributed to the physical stack height, no additional aerodynamic, decay or buoyant factors are included which would further reduce the concentration.

The stable case only contributes to ground level concentrations at distances of several miles, since it remains aloft near the source. Close in concentrations are generally from the unstable case. The uncertain nature of the directional variation of a stable plume at great distances reduces the favorability of the case for use in controlled releases. Use of the unstable case (class 2) with the more favorable diffusion characteristics and higher wind speeds is recommended for controlled releases.

Certain meteorological criteria must be met to insure the prevailing conditions will continue during the release interval. No precipitation should be occurring at the time of release or predicated during the release. The temperature lapse rate (232'-32') should be more negative than -1.5 degrees F with the 235 foot wind speed averaging at least 10 mph. These conditions infer a release occurring between mid-morning into late afternoon.

Analysis of the constancy show that persistent conditions can occur from any direction for short periods. However, as the time of release increases directions from the northeast to southeast become more probable. This infers that the chosen wind direction should persist, on the average, for at least 12 to 24 hours in an eighteen degree sector, particularly for onshore winds. Forecasts of significant changes in the weather during the release times should be carefully considered. Sources of current meteorological observations can be obtained from the U.S. Weather Bureau office in Miami and Homestead Air Force Base.

Once the meteorological conditions are applicable, values of the concentration can be computed using the actual 235' wind speed and the approximate release rate. When the determination of concentrations are within prescribed limits and the release initiated, the meteorological parameters should be constantly monitored. Termination of the release would occur if the prevailing meteorological conditions fall below the specified values.

References

1. Singer, I.A. and M. E. Smith, Relations of Gustiness to Other Meteorological Parameters, Journal of Meteorology, Vol. 10 (2), 1953.

2. Slade, D.H., Estimates of Dispersion from Pollutant Releases of a Few Seconds to 8 Hours Duration, Report WBTN-ARL-3(PB-170745), April 1966.

3. Hosler, C.R., Climatological Estimates of Diffusion Conditions in the United States, Nuclear Safety, Vol. 5 (2), Winter 1963-1964.

4. Frizzola, J.A. and E. L. Fisher, A Series of Sea Breeze Observations in the New York City Area, Journal of Applied Meteorology, Vol. 2 (6), 1963.

5. Prophet, D.T., Survey of the Available Information Pertaining to the Transport and Diffusion of Airborne Material over Ocean and Shoreline Complexes, Technical Report 89(AD-258958), Aerosol Laboratory, Stanford University, June 1961.

6. Singer, I.A., Steadiness of the Wind, Journal of Applied Meteorology, Vol. 6 (6), Dec. 1967.

7. Gumbel, E.J., Statistical Theory of Extreme Values and Some Practical Applications, National Bureau of Standards, Applied Math Series 33, 1954.

8. Van der Hoven, I., Atmospheric Transport and Diffusion at Coastal Sites, Nuclear Safety, Vol. 8 (5), Sept.-Oct. 1967.

9. Dwyer, J. and G. L. Tucker, Summary of One Year of Data from the Cape Kennedy WIND System, AFCRL-65-637, 1965.

10. Panofsky, H.A. and B. Prasad, Similarity Theories and Diffusion, International Journal of Air and Water Pollution, Vol. 9, 1965.

11. Panofsky, H.A., A Survey of Current Thought on Wind Properties Relevant for Diffusion in the Lowest 100 meters, Symposium on the Theory and Measurement of Atmospheric Turbulence and Diffusion in the Planetary Boundary Layer, SC-M-68-191, 1968.

12. Smith, M.E., Recommended Guide for the Prediction of the Dispersion of Airborne Effluents, American Society of Mechanical Engineers, May 1968

13. Pasquill, F., Atmospheric Diffusion, 209 pp., Van Nostrand, London, 1962.

14. Slade, O.H. ed., Meteorology and Atomic Energy 1968, TID-24190, July 1968.

15. Singer, I.A., J.A. Frizzola, and M.E. Smith, A Simplified Method of Estimating Atmospheric Diffusion Parameters, Journal APCA, Vol. 16 (11), 1966.

16. Haugen, D.A. and J. H. Taylor, The Ocean Breeze and Dry Gulch Diffusion Programs, AFCRL-63-791 (11), 1963.

17. Turner, D. Bruce, Workbook of Atmospheric Dispersion Estimates, PHS Publication No. 999-AP-26, 1967.

18. Smith, M.E. and I.A. Singer, An Improved Method of Estimating Concentrations and Related Phenomena from a Point Source Emission, Journal of Applied Meteorology, Vol. 5 (5), Oct. 1966

19. Gifford, F.A., Atmospheric Dispersion Calculations Using the Generalized Gaussian Plane Model, Nuclear Safety, Vol. 2 (2), Dec. 1960.

20. Dickson, C. R. , Start, G.E., and Markee, E.H., Jr., Aerodynamic Effects of the EBR-2 Containment Vessel Complex on Effluent Concentration, Presented at the USAEC Meteorological Information Meeting, Chalk River, Ontario, Canada, September 11-14, 1967.

TABLE 2A-1

Percentage Frequency of Turbulence Classes

Turkey Point 1968

	CLASS 1	CLASS 2	CLASS 3	CLASS 4
Jan.	1	53	1	45
Feb.	3	61	3	33
Mar.	1	91	2	7
Apr.	1	84	1	14
May	2	83	1	14
Jun.	-	74	12	14
Jul.	-	96	-	4
Aug.	1	82	-	17
Sep.	1	37	14	48
Oct.	-	41	-	59
Nov.	-	36	7	57
Dec.	-	38	11	51
Annual	<1	66	4	30

TABLE 2A-2

Percentage of Turbulence Classes Associated
With Onshore Winds (030-210)

Turkey Point 1968

	CLASS			
	1	2	3	4
Jan.	-	29	-	36
Feb.	-	22	-	13
Mar.	-	68	-	3
Apr.	-	70	-	7
May	-	70	-	11
Jun.	-	55	6	9
Jul.	-	94	-	2
Aug.	-	79	-	11
Sep.	-	30	12	32
Oct.	-	36	-	38
Nov.	-	19	4	37
Dec.	-	23	7	31
Annual	-	50	2	19

TABLE 2A-3

Wind Speeds Associated With
Turbulence Class

Turkey Point 1968

235 FT. WIND SPEEDS (MPH)

CLASS

	1	2	3	4
Jan.	7	14	10	12
Feb.	7	14	17	10
Mar.	5	17	16	13
Apr.	5	12	10	6
May	6	13	12	7
Jun.	-	12	30	7
Jul.	-	12	-	9
Aug.	4	11	-	5
Sep.	5	11	16	8
Oct.	-	17	-	12
Nov.	-	14	16	13
Dec.	-	13	19	13
Annual	5	13	16	10

TABLE 2A-4

Percentage Frequency of Lapse Rates (232-32 Ft.)

Turkey Point 1968

Lapse Rate Groups (°F)

	UNSTABLE		TRANSITION	STABLE		
	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10.0
Jan.	19	18	45	12	4	2
Feb.	29	22	30	12	5	2
Mar.	33	17	35	4	1	-
Apr.	40	37	14	8	1	-
May	22	38	37	3	-	-
Jun.	23	33	41	3	-	-
Jul.	36 -	42	21	1	-	
Aug.	34	40	23	3	-	-
Sep.	29	34	31	6	-	-
Oct.	24	33	39	3	-	-
Nov.	20	15	52	10	2	1
Dec.	19	15	39	20	5	2
Annual	27	29	34	7	2	1

TABLE 2A-5

Monthly Percentage Frequency of Hourly Temperatures (°F)
32 Foot Level   Turkey Point 1968

	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	OCEAN TEMP.*
Jan.		2	11	46	41		71.9
Feb.		7	28	44	20		72.7
Mar.	1	4	13	37	45		75.2
Apr.				14	77	9	77.6
May				3	76	21	82.4
Jun.					55	45	85.5
Jul.					15	85	87.8
Aug.					14	86	88.5
Sep.					40	60	86.3
Oct.			1	9	56	34	82.1
Nov.		3	11	22	60	4	77.1
Dec.	1	6	17	36	39	1	73.3

*Climatological averages

TABLE 2A-6

Lapse Rates and Wind Speeds
Associated With Turbulence Class 2
(Percent)

	235 FT. SPEED (MPH)				
LAPSE RATE (°F)	0-3	4-7	8-12	13-18	19+
-5.9 to -1.5	-	2	16	14	6
-1.4 to -0.8	-	3	14	13	6
-0.7 to 1.5	-	2	9	8	5
1.6 to 3.5	-	1	-	1	-
3.6 to 5.5	-	-	-	-	-
5.6 to 10.0	-	-	-	-	-

NOTE: Values less than 0.5% not entered

TABLE 2A-7

Lapse Rates and Wind Speeds
Associated With Turbulence Class 3
(Percent)

235 FT. SPEED (MPH)

LAPSE RATE (°F)	0-3	4-7	8-12	13-18	19+
-5.9 to -1.5	-	-	2	3	9
-1.4 to -0.8	-	-	5	15	16
-0.7 to 1.5	-	-	6	14	30
1.6 to 3.5	-	-	-	-	-
3.6 to 5.5	-	-	-	-	-
5.6 to 10.0	-	-	-	-	-

NOTE: Values less than 0.5% not entered

TABLE 2A-8

Lapse Rates and Wind Speeds
Associated With Turbulence Class 4
(Percent)

235 FT. SPEED (MPH)

LAPSE RATE (°F)	0-3	4-7	8-12	13-18	19+
-5.9 to -1.5	-	1	2	1	-
-1.4 to -0.8	1	3	6	3	-
-0.7 to 1.5	4	11	17	16	5
1.6 to 3.5	2	3	5	8	3
3.6 to 5.5	1	1	2	2	1
5.6 to 10.0	-	1	1	-	-

NOTE: Values less than 0.5% not entered

TABLE 2A-9

Precipitation - Turkey Point 1968

	Number of Hourly Occurrences in Each Interval					Rainfall
	.01 to .10	.11 to .40	.41 to .70	.71 to 1.00	1.00+	(Inches)
Jan.	7	2	2	-	-	1.76
Feb.	8	2	2	1	-	2.22
Mar.	3	1	-	-	-	0.37
Apr.	1	1	-	1	-	0.95
May	33	20	5	6	4	20.44
Jun.	36	17	5	4	5	18.90
Jul.	26	7	3	-	-	4.16
Aug.	17	12	3	1	-	5.63
Sep.	25	9	4	-	1	6.74
Oct.	26	20	1	-	4	14.13
Nov.	1	3	1	-	-	1.28
Dec.	3	-	-	-	1	1.52
					Total Rainfall	

*122 hours missing

TABLE 2A-10

Percentage Frequency of 30 Foot Wind Speeds
Turkey Point 1968

SPEED CLASS (MPH)

	0-3	4-7	8-12	13-18	19+	MEAN SPEED
Jan.	6	30	43	17	4	9
Feb.	3	25	46	21	5	10
Mar.	-	9	43	39	9	12
Apr.	5	29	41	23	2	9
May	7	29	40	18	6	9
Jun.	6	28	42	15	9	10
Jul.	2	19	59	19	1	9
Aug.	7	28	51	13	1	7
Sep.	9	33	41	15	2	8
Oct.	2	25	38	22	13	11
Nov.	2	28	46	22	2	10
Dec.	5	28	47	19	1	9
Annual	5	26	45	20	4	9

TABLE 2A-11

Percentage Frequency of 30 Foot Wind Speeds

Turkey Point 1968

SPEED CLASS (MPH)

	0-3	4-7	8-12	13-18	19+	MEAN SPEED
Jan.	2	14	32	33	19	13
Feb.	5	12	33	36	14	12
Mar.	-	2	22	39	37	16
Apr.	5	14	39	31	10	11
May	4	16	34	31	15	12
Jun.	2	13	42	25	18	13
Jul.	1	5	47	42	5	12
Aug.	7	19	49	23	2	10
Sep.	7	17	47	24	5	10
Oct.	1	9	38	26	26	14
Nov.	2	7	26	43	22	14
Dec.	2	5	29	45	19	14
Annual	3	11	37	33	16	13

TABLE 2A-12

Monthly Distribution of Calms
Turkey Point 1968

NUMBER OF HOURS REPORTED

	30 Ft.	235 Ft.
Jan.	0	0
Feb.	0	5
Mar.	0	0
Apr.	0	9
May	8	0
Jun.	3	1
Jul.	2	0
Aug.	6	3
Sep.	5	0
Oct.	1	0
Nov.	2	3
Dec.	7	2
Total	34	23

TABLE 2A-13

Percentage of Onshore Winds Day & Night
Turkey Point 1968

<u>30 FOOT LEVEL</u>

	Daytime (07-18)	Nighttime(19-06)
Jan.	62	58
Feb.	44	25
Mar.	75	64
Apr.	85	74
May	86	79
Jun.	78	78
Jul.	96	95
Aug.	91	89
Sep.	73	73
Oct.	72	76
Nov.	64	52
Dec.	65	52
Annual	74	68

NOTE: Onshore winds defined as (030-210) degrees

TABLE 2A-14

Observed Extremes of the Steadiness

Turkey Point, Florida

Time Interval (Days)

	2	4	8	16	30
HIGH	.93	.88	.84	.81	.75
LOW	.79	.66	.45	.34	.30
MEAN	.89	.76	.67	.57	.44

West Palm Beach, Florida

Time Interval (Days)

	2	4	8	16	30
HIGH	.92	.87	.80	.60	.50
LOW	.78	.65	.36	.27	.10
MEAN	.85	.79	.66	.48	.38

TABLE 2A-15

Return Period for a Steadiness of 0.9 for Various Time Intervals (66 per cent confidence limit)*

Time (Day)	Return Period (Months)	Probable Speed (mph)	Probable Direction
2	3 (1-9)	8-20	Any
4	23 (7-70)	10-15	ENE
8	25 (8-80)	7-13	ENE
16	25 (8-80)	6-10	ENE
30	300 (100-1000)	6-10	E

NOTE: 0.9 equivalent to an 18 degree sector

TABLE 2A-16

Turbulence Estimates From Wind Speed and Lapse Rate Data

Turkey Point

	CLASS 2	CLASS 3	CLASS 4
200l Lapse Rate (ºF)	-1.5	-0.7	+0.4
235' Wind Speed (MPH)	13.0	16.0	10.0
Ratio of Speeds (235/30)	1.3	1.4	1.8
P	0.14	0.18	0.31
100 B	-1.74	+1.1	+19.1
SA (Degrees)	20	8	<4
SE (Degrees)	10	5	2

Where: P - is exponent in wind profile.

SA, SE - standard deviation of lateral and vertical wind fluctuations respectively.

B - parameter relating ratio of thermal to mechanical turbulence.

NOTE: See Appendix A for definition of tenms

TABLE 2A-17

Diffusion Parameters for Turkey Point (235')

<u>Stable Case:</u> σ_a = 3 degrees, _ = 4.5m/sec

$\sigma_y = 0.37\ x^{0.71}$ (1)

$\sigma_z = 0.08\ x^{.071}$ (2)

<u>Unstable Case:</u> σ_a = 10 degrees, _ = 5.8 m/sec

$\sigma_y = 0.45\ x^{.86}$ (3)

$\sigma_z = 0.32\ x^{.86}$ (4)

Where: σ_a - standard deviation of azimuth angle (degrees)

σ_y, σ_z- plane standard deviations (m)

x - downwind distance (m)

_ - mean wind speed at 235 ft. (m/sec)

APPENDIX A

Computed Parameters from Observed Data

$V_2/V_1 = (235/30)^P$

$B = (g/T)(Z^2/V^2)\ (dT/dZ + 1.1)$

Where: V_1, V_2 - wind speeds at 30 and 235 feet

P - exponent in the wind profile equation

g - acceleration of gravity

dT/dZ - temperature difference (235'-32')

APPENDIX B

Gaussian Plume Equations

A) Centerline ground level concentrations for a source at ground level.

$$\frac{X}{Q} = \frac{1}{\pi \sigma_y \sigma_z \bar{\mu}} \tag{5}$$

B) Ground level concentrations within a sector for a source at ground level.

$$\frac{X}{Q} = \frac{360\,f}{\varphi\, 100 \pi^{3/2}\, 2^{1/2}\, \sigma_z \bar{\mu} x} \tag{6}$$

C) Centerline ground level concentrations for an elevated source:

$$\frac{x\bar{\mu}}{Q} = \frac{1}{\pi \sigma_y \sigma_z} \exp - \left[\frac{H^2}{2\sigma_z^{\,2}} \right] \tag{7}$$

Where: X - ground level concentration (units/m^3)

Q - source release rate (units/sec)

$\bar{\mu}$ - mean wind speed at source height (m/sec)

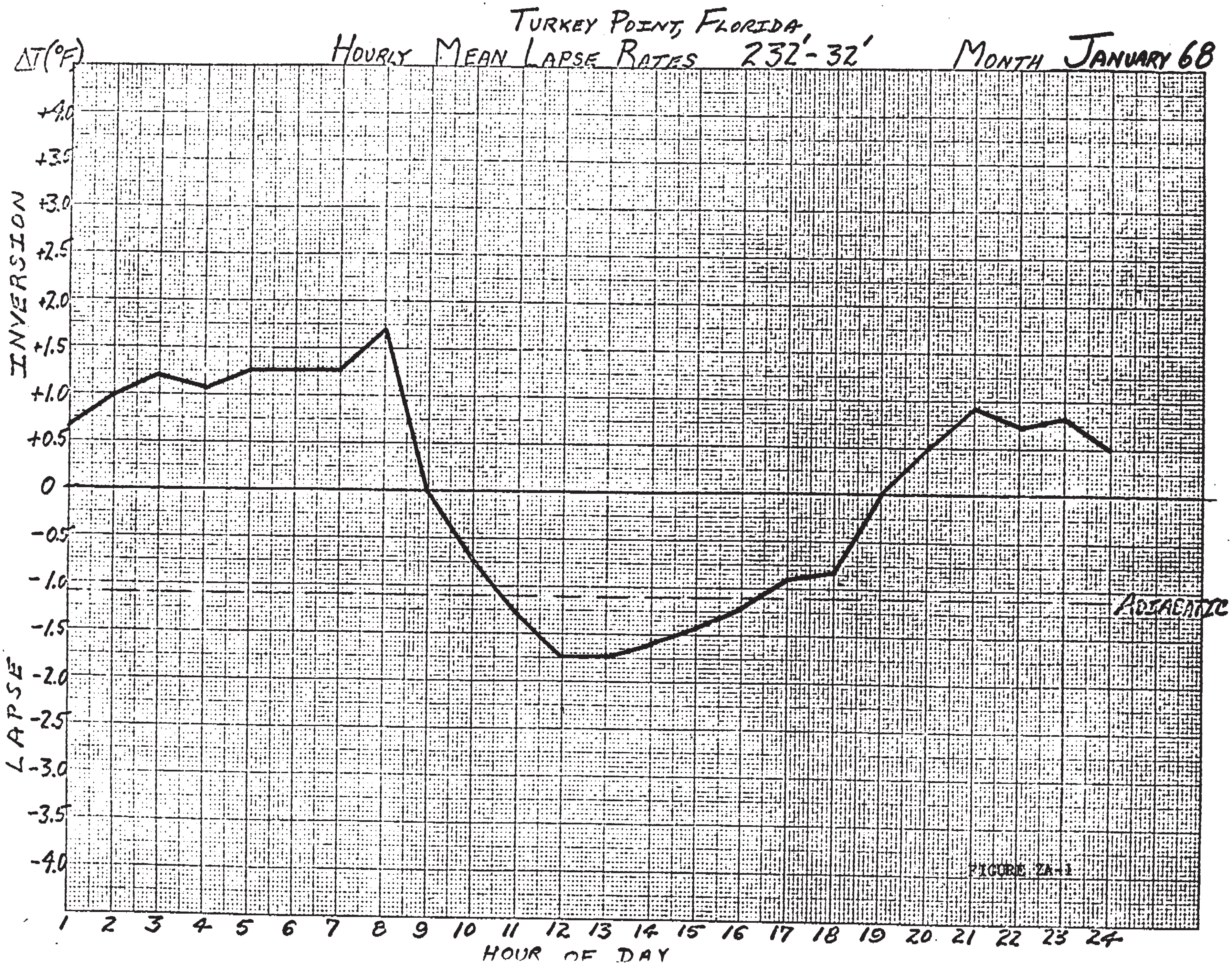
σ_y, σ_z - horizontal and vertical plume standard deviations (m)

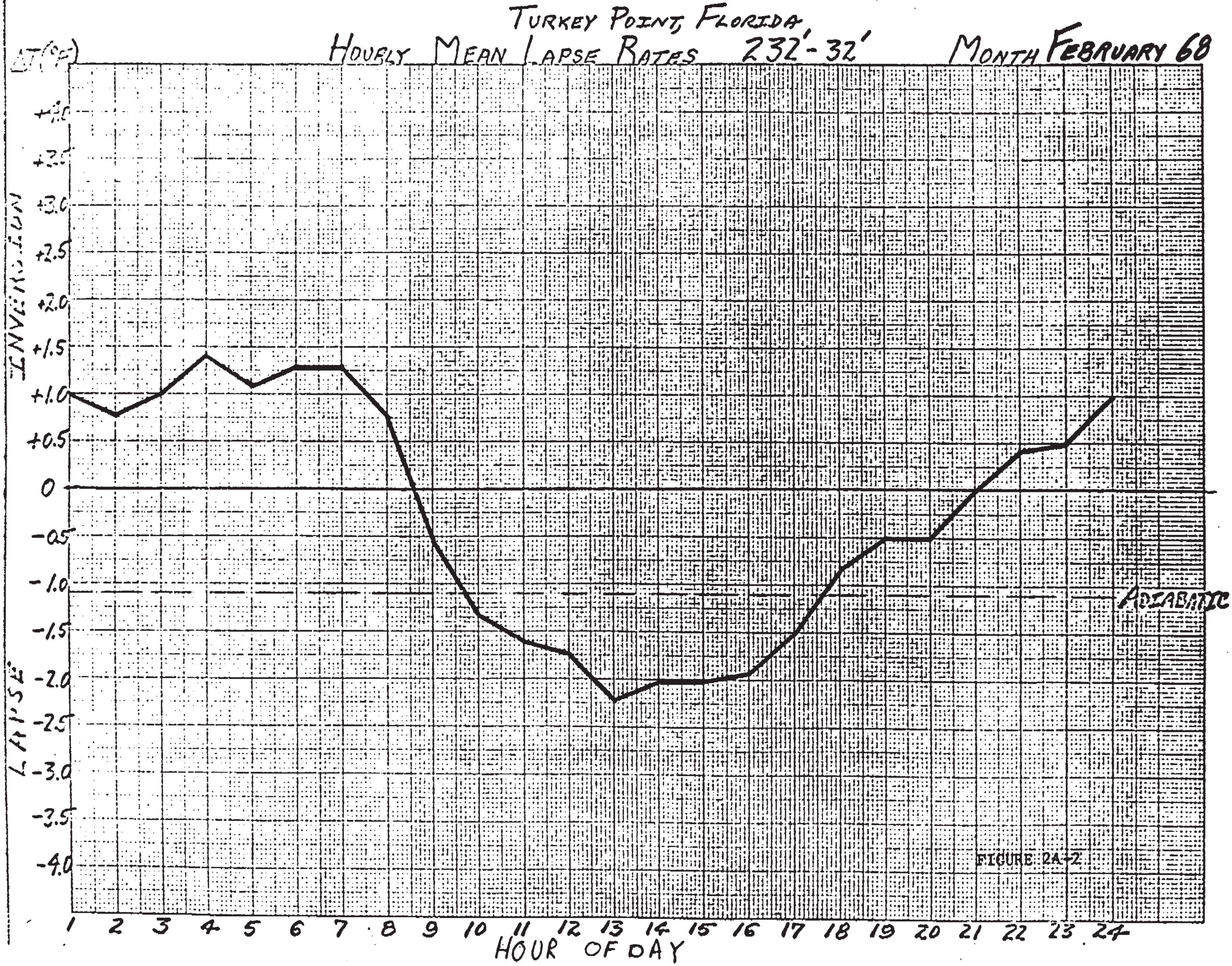
H - source height (m)

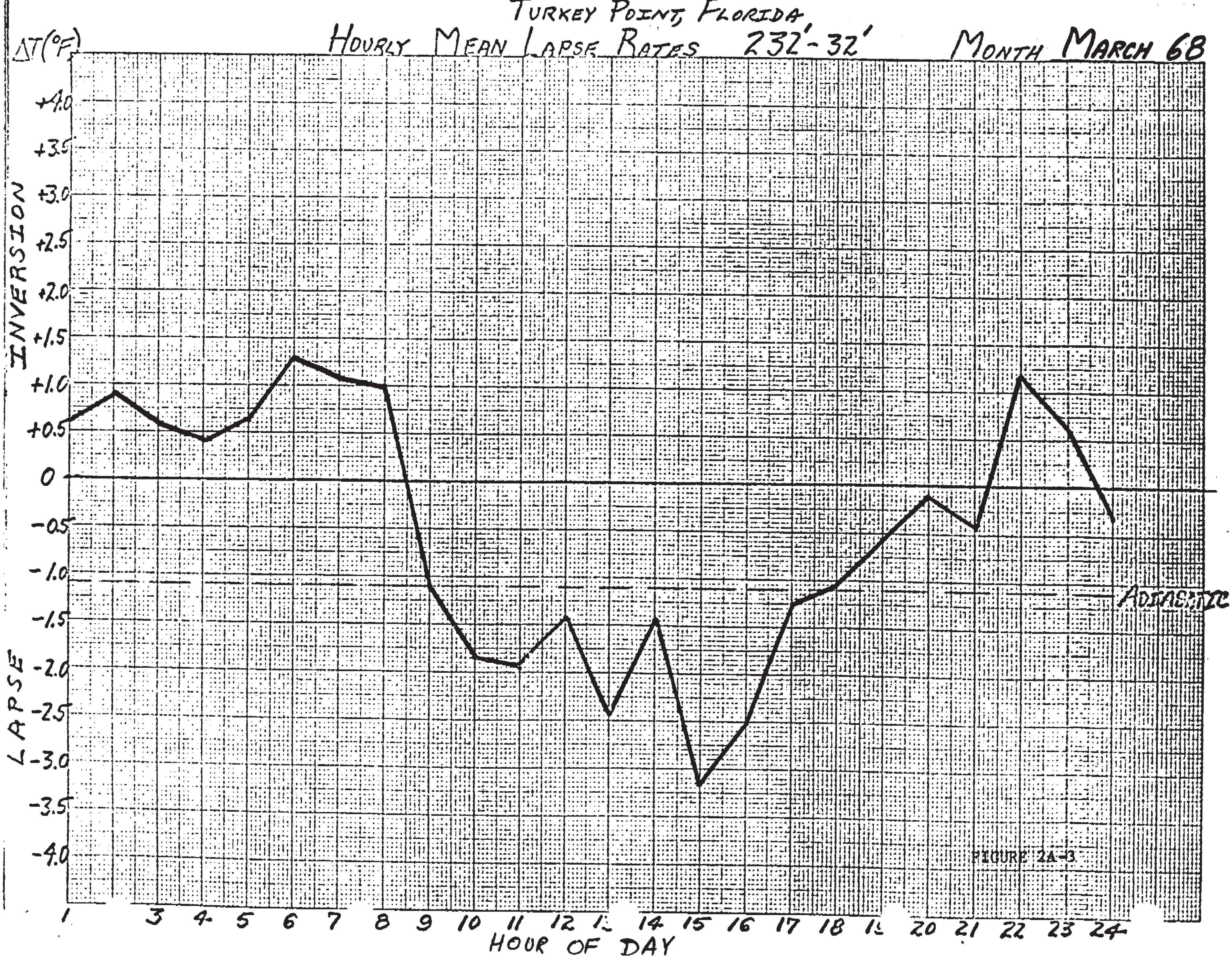
f - frequency of meteorological conditions in sector (%)

φ - angular width of sector (degrees)

x - downwind distance (m)

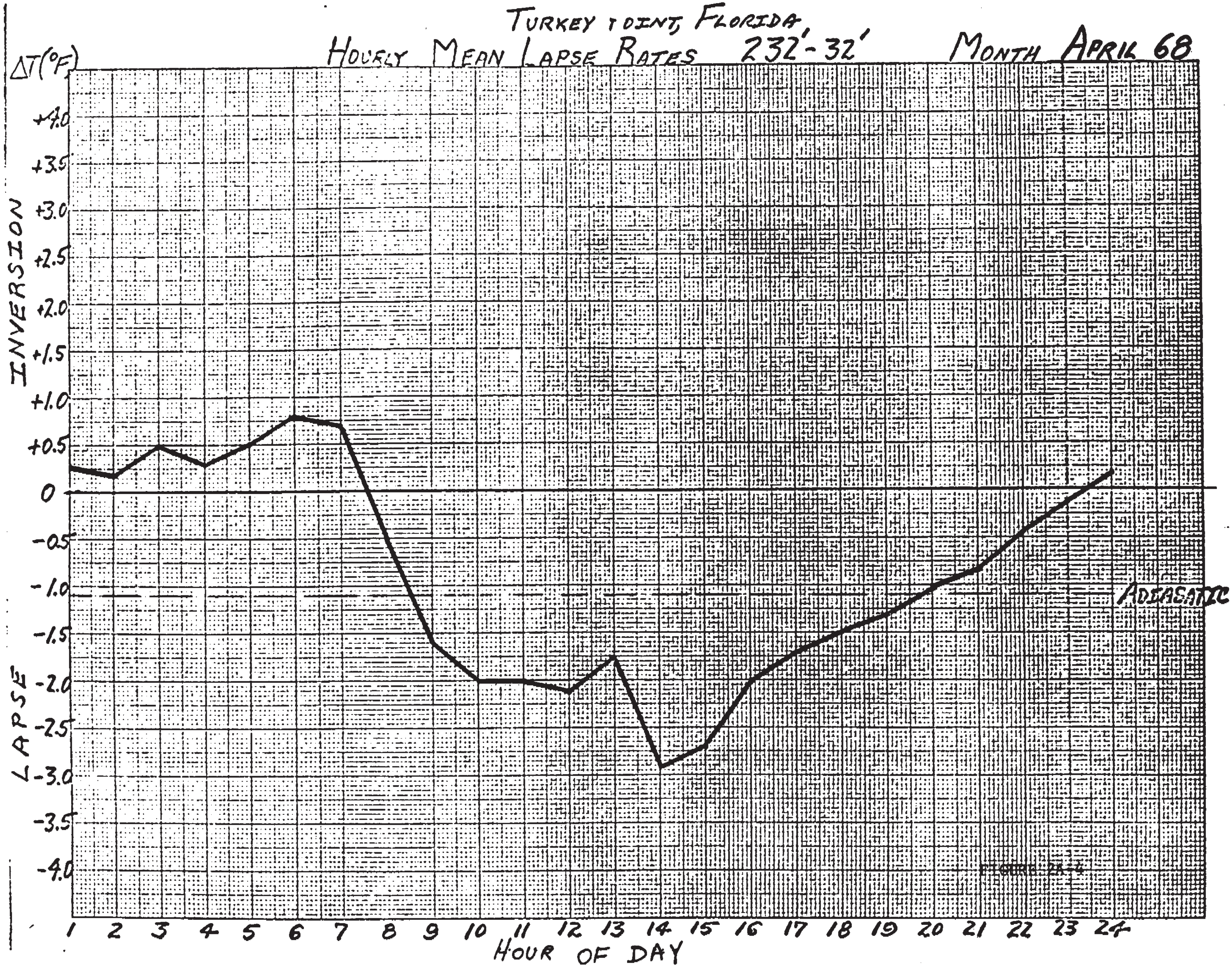

TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH JANUARY 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY
FIGURE 2A-1


TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH FEBRUARY 68
INVERSION
LAPSE
ADIABATIC
HOUR OF DAY
FIGURE 2A-2

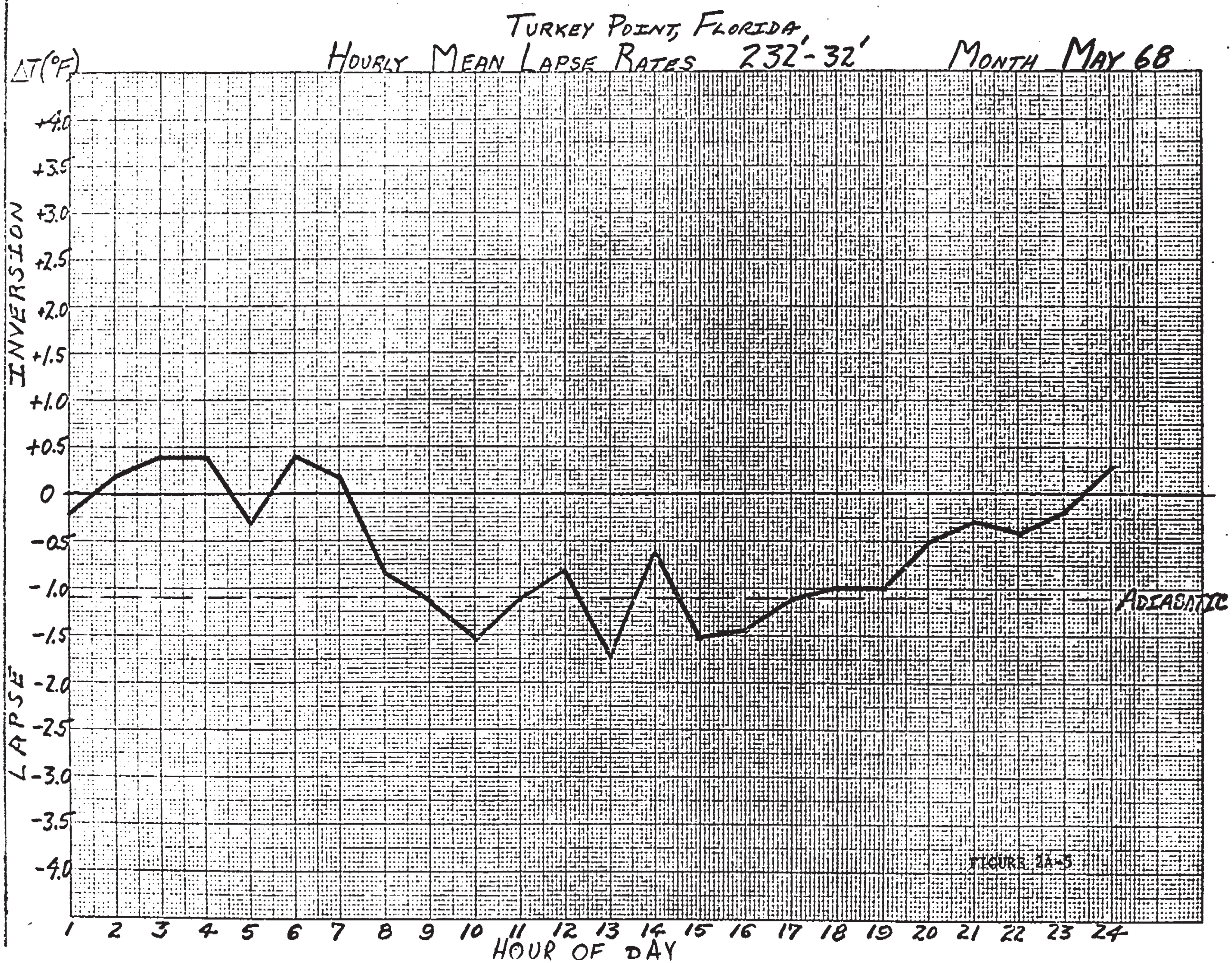


TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH MARCH 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-3

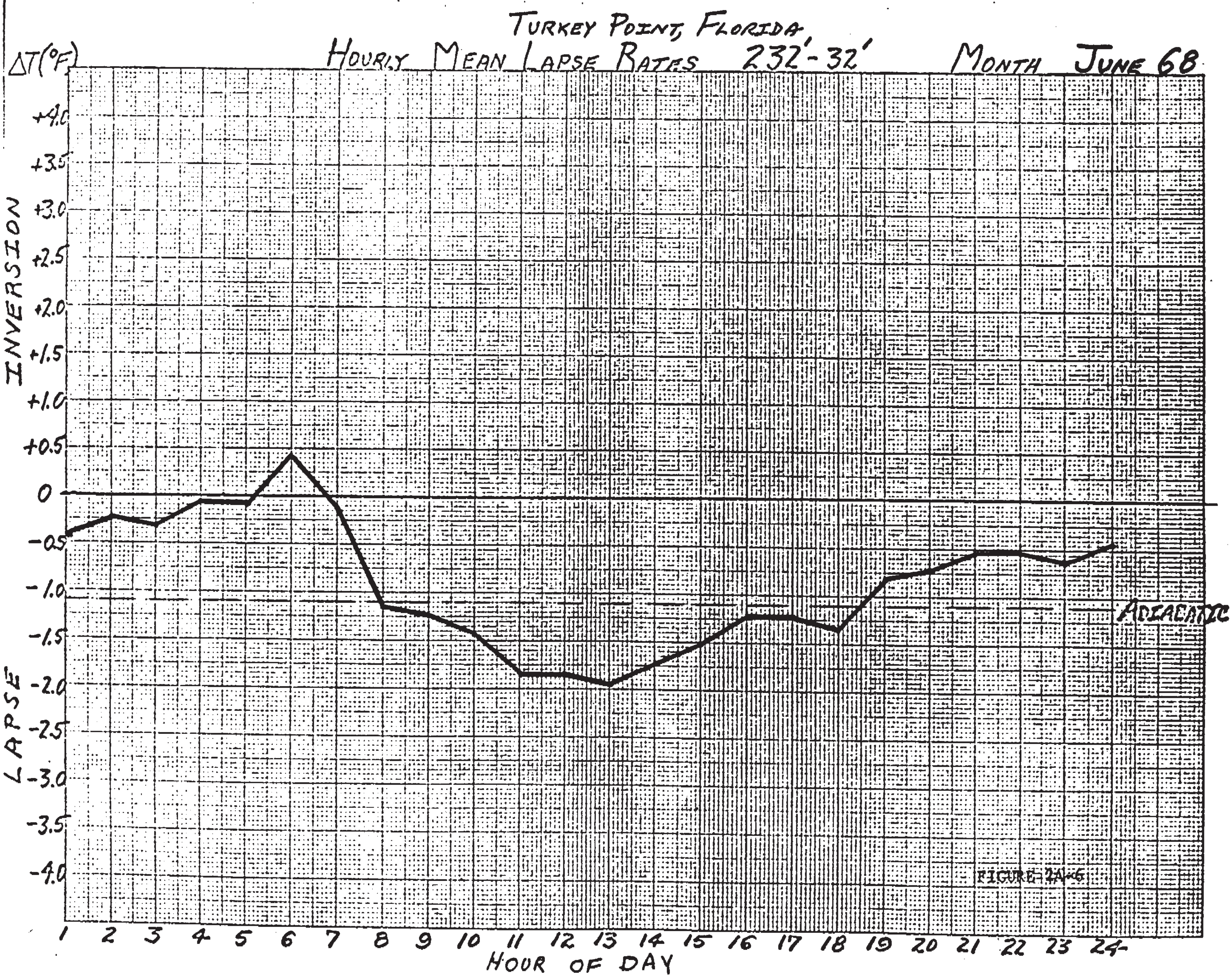


TURKEY POINT, FLORIDA,
HOURLY MEAN LAPSE RATES 232'-32'
MONTH APRIL 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

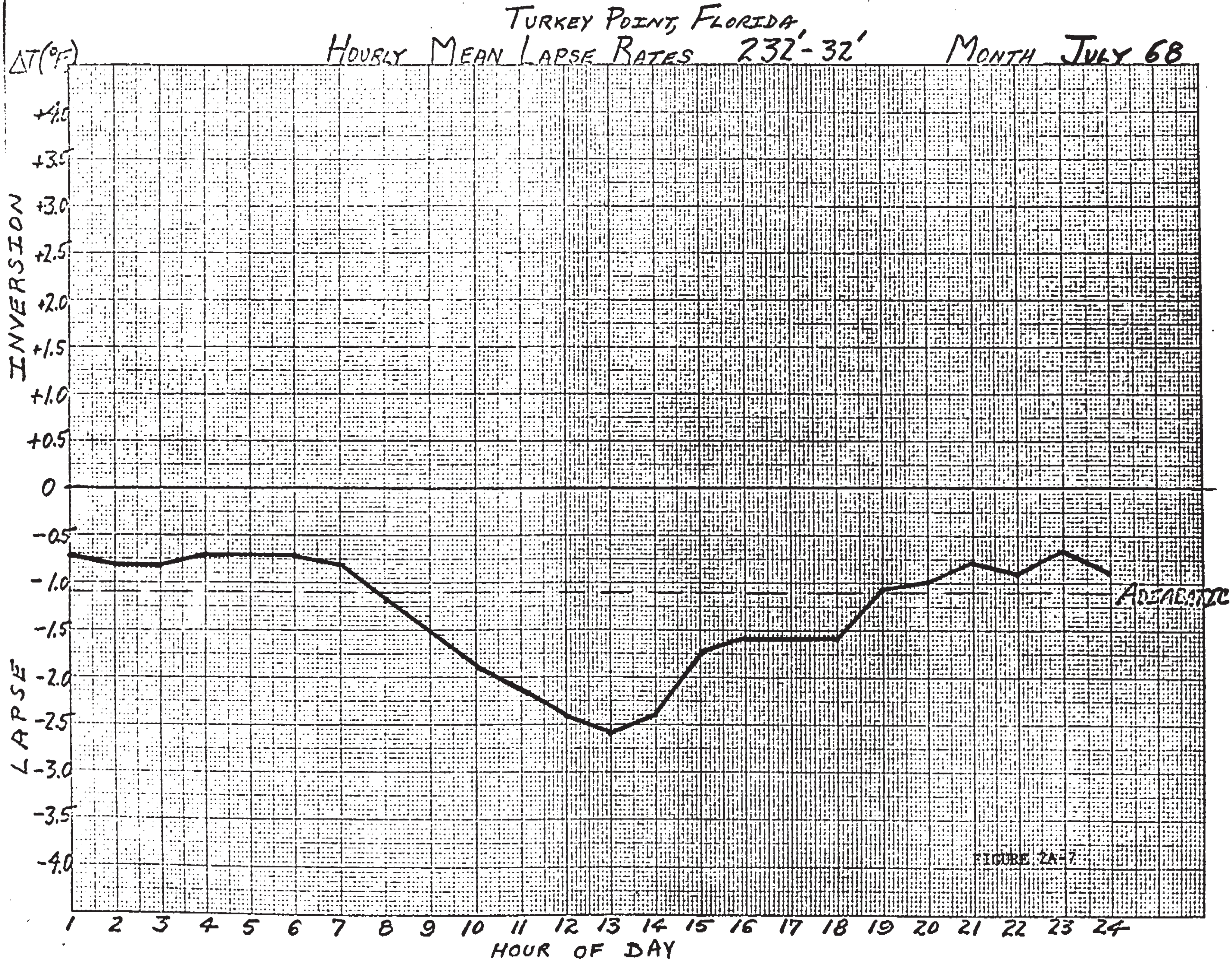


TURKEY POINT, FLORIDA,
HOURLY MEAN LAPSE RATES 232'-32'
MONTH MAY 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-5

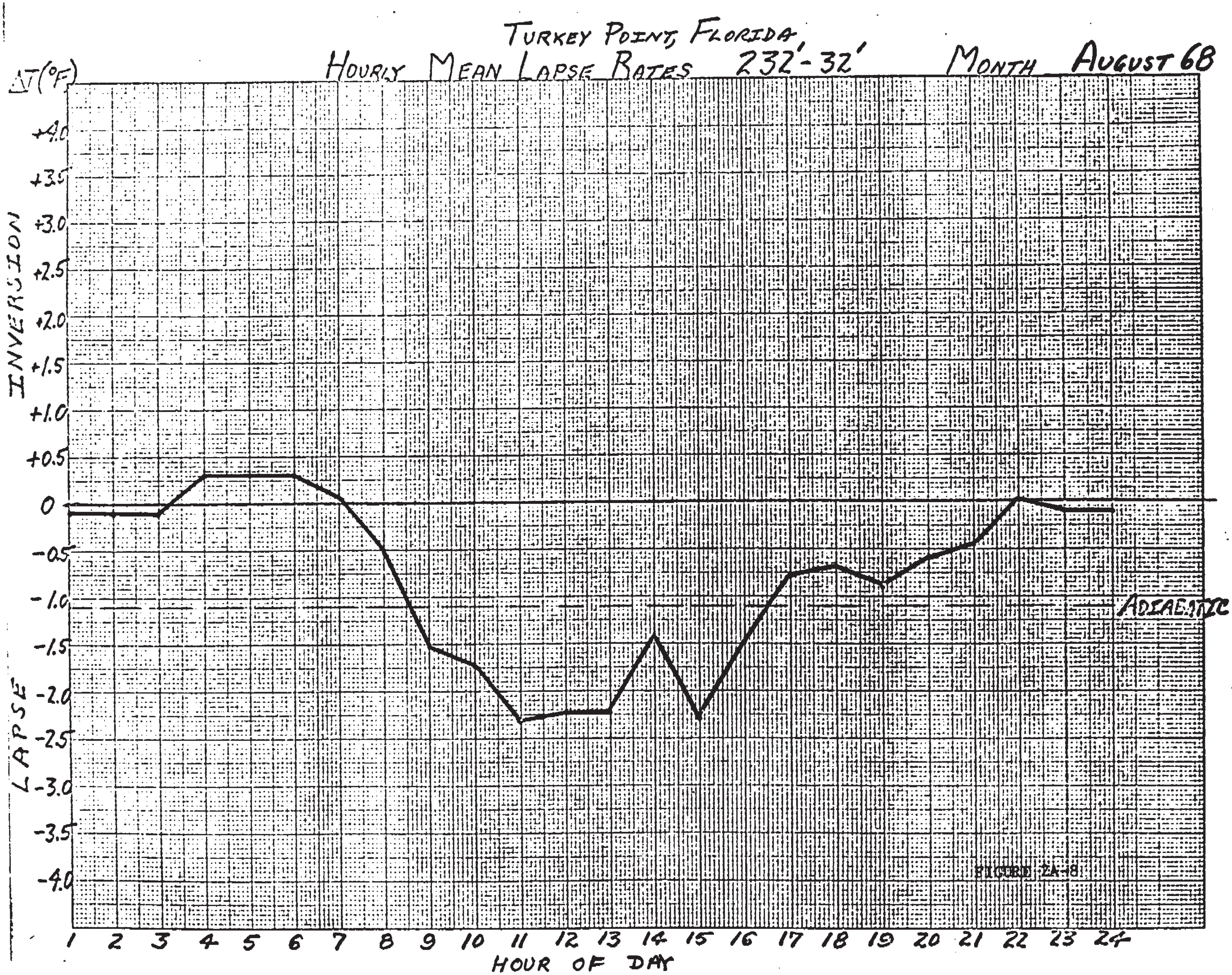


TURKEY POINT, FLORIDA,
HOURLY MEAN LAPSE RATES 232'-32'
MONTH JUNE 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
FIGURE 2A-6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY



TURKEY POINT, FLORIDA,
HOURLY MEAN LAPSE RATES 232'-32'
MONTH JULY 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-7



TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH AUGUST 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-8

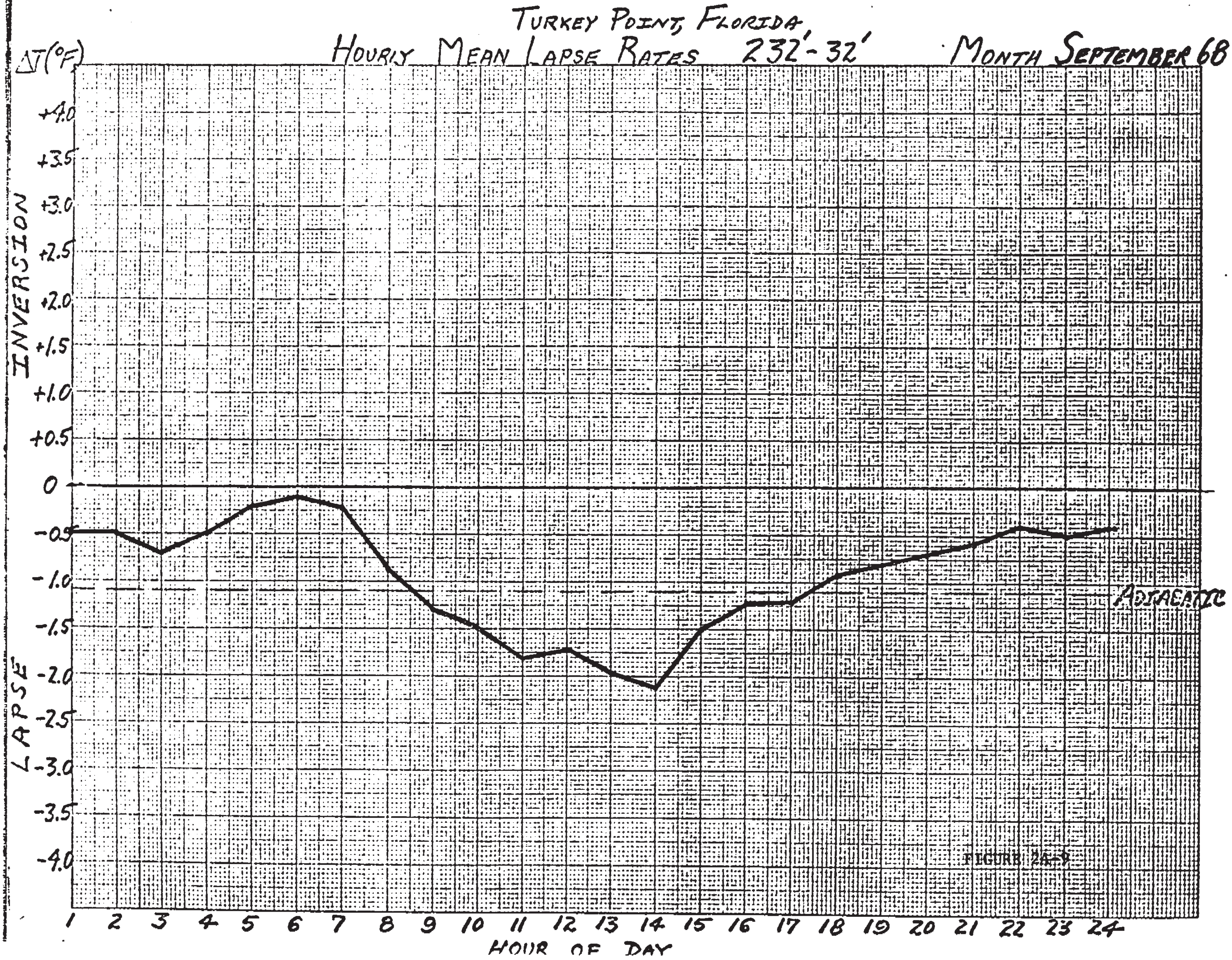

TURKEY POINT, FLORIDA,
HOURLY MEAN LAPSE RATES 232'-32'
MONTH SEPTEMBER 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-9

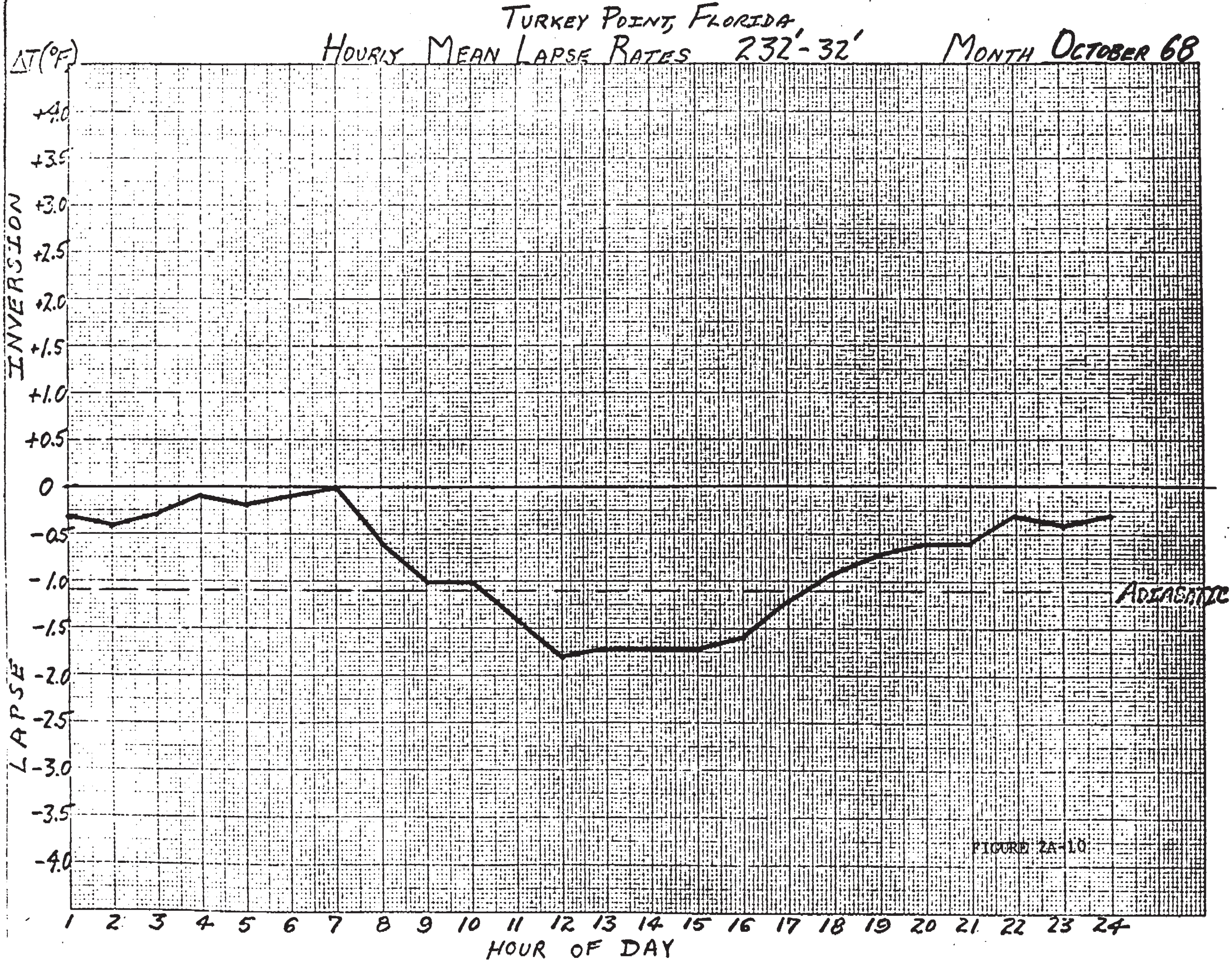
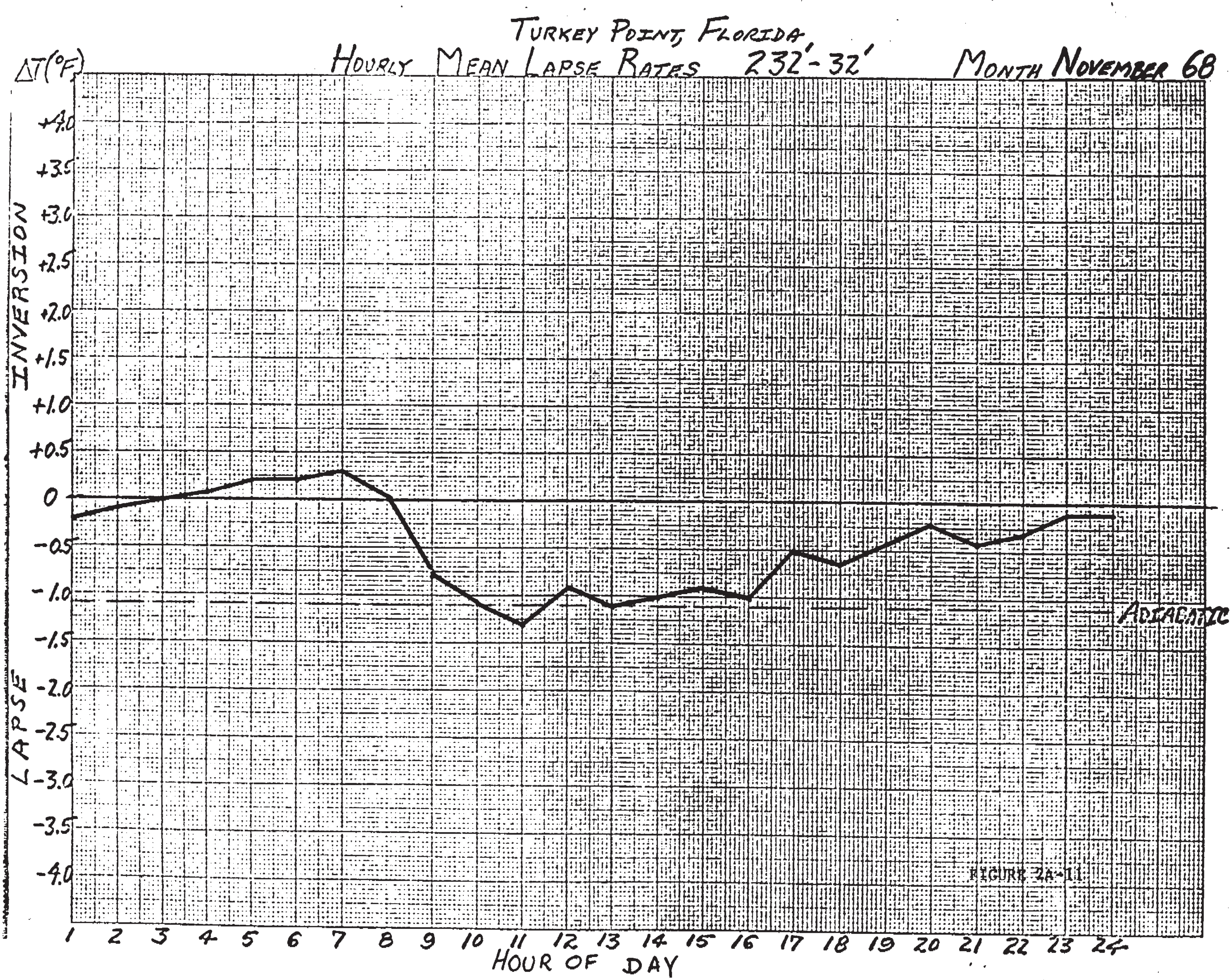

TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH OCTOBER 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY

FIGURE 2A-10


TURKEY POINT, FLORIDA
HOURLY MEAN LAPSE RATES 232'-32'
MONTH NOVEMBER 68
ΔT(°F)
INVERSION
LAPSE
+4.0
+3.5
+3.0
+2.5
+2.0
+1.5
+1.0
+0.5
0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
ADIABATIC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
HOUR OF DAY
FIGURE 2A-11

TURKEY POINT, FLORIDA

HOURLY MEAN LAPSE RATES 232'-32' MONTH DECEMBER 68

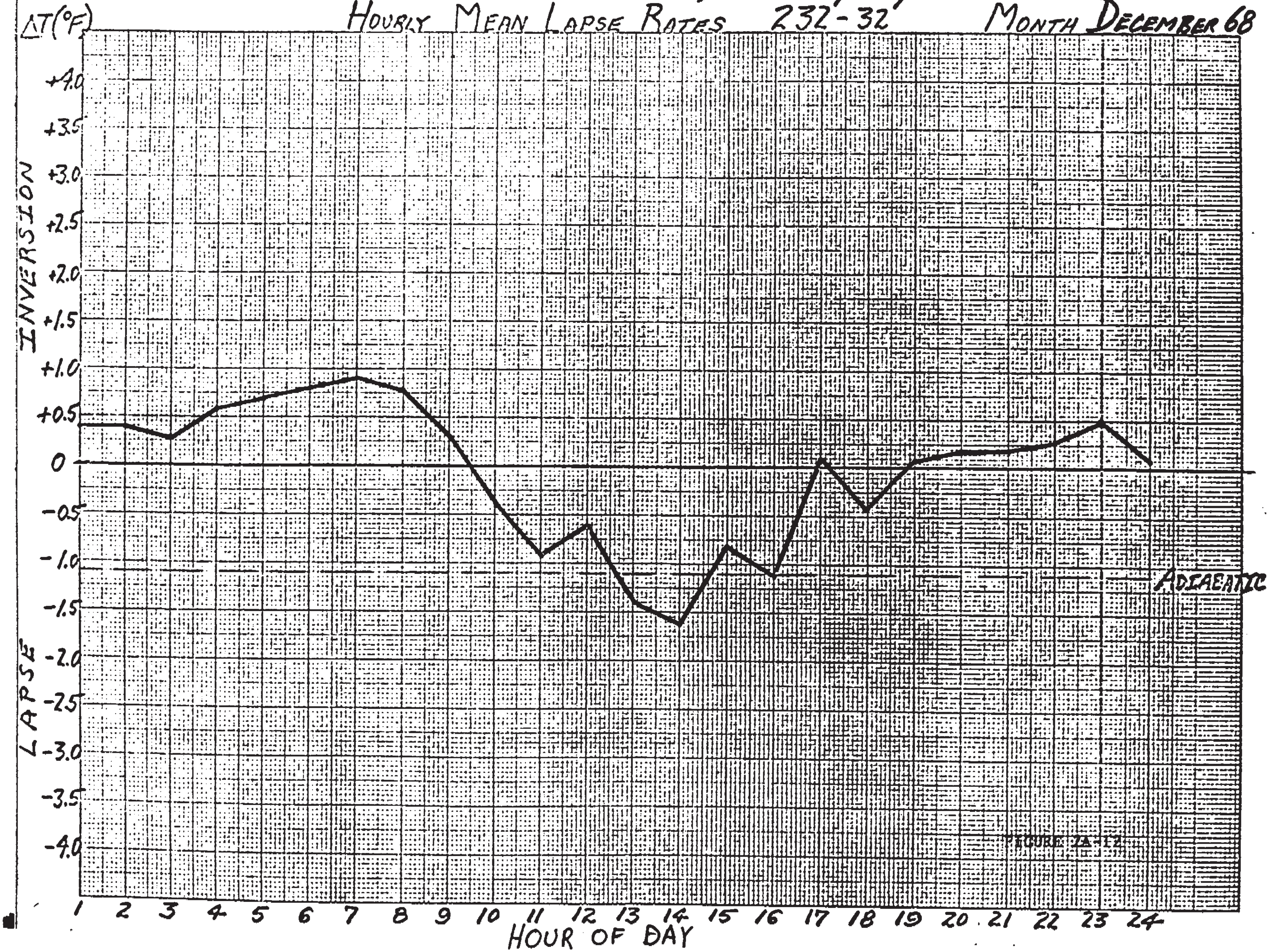
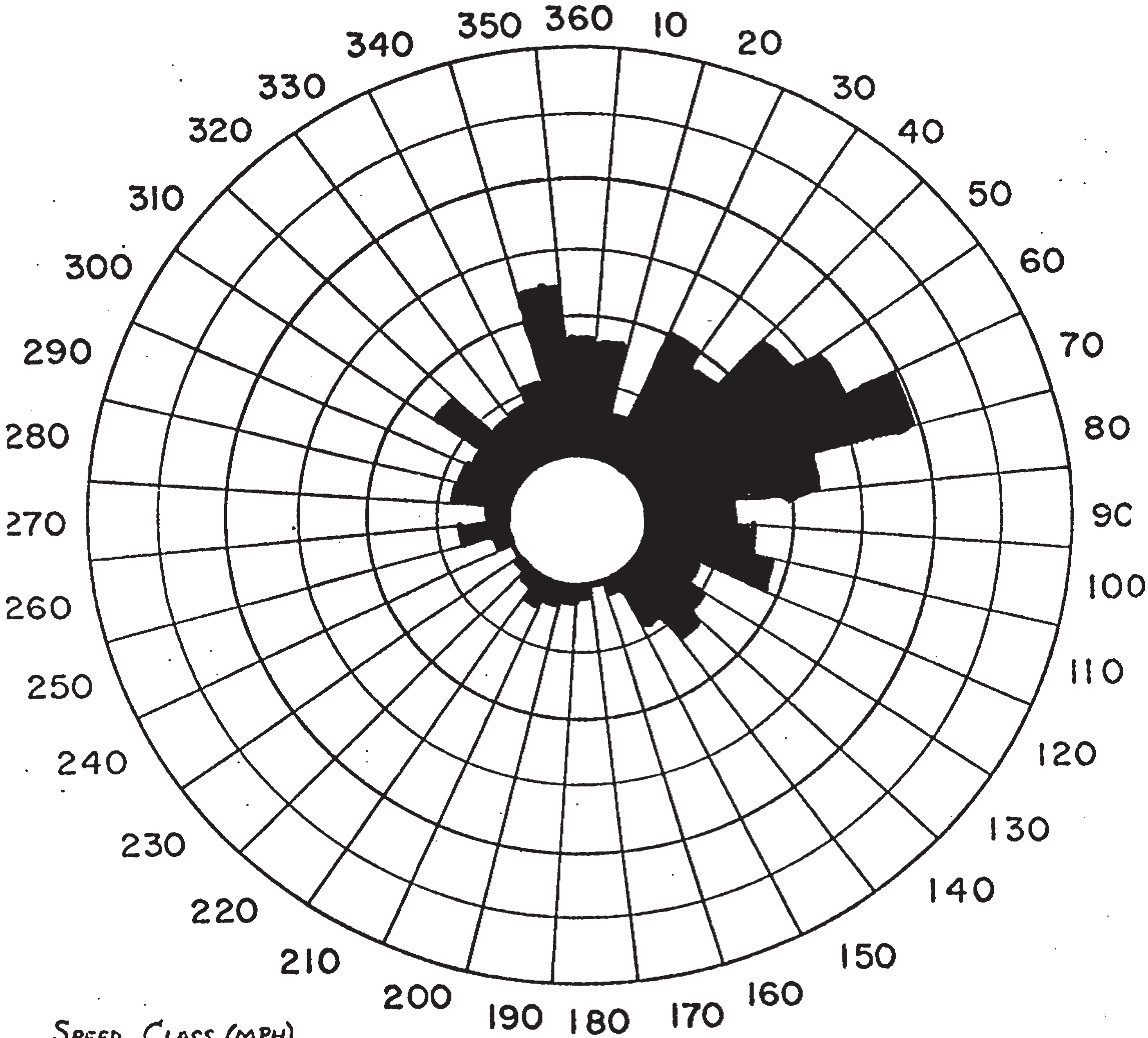


FIGURE 2A-12

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD January 1968

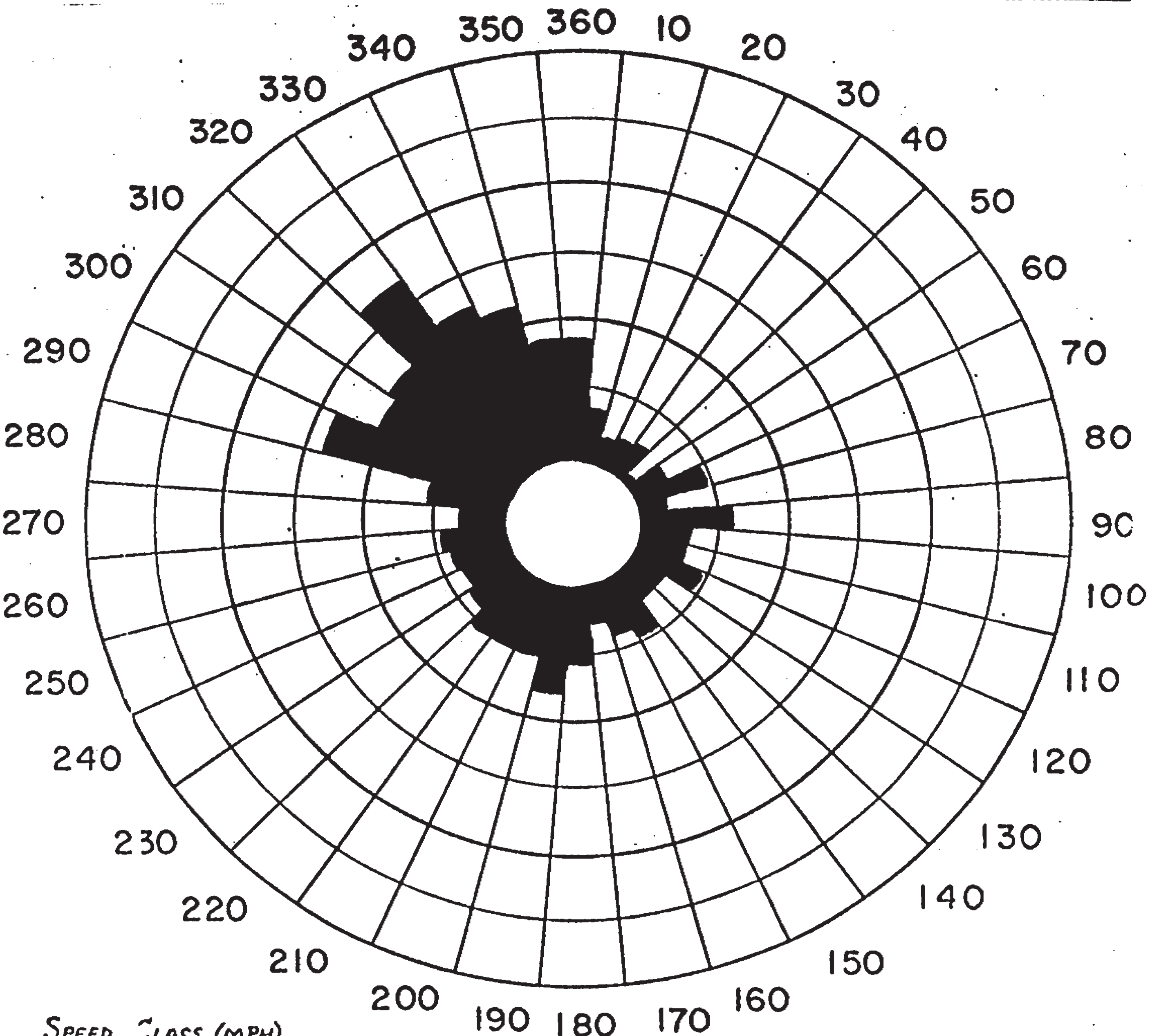


Speed Class (MPH)	Percent
0-3	2
4-7	14
8-12	32
13-18	33
19+	19

FIGURE 2A-13

Scale 1" = 5%

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD February 1968

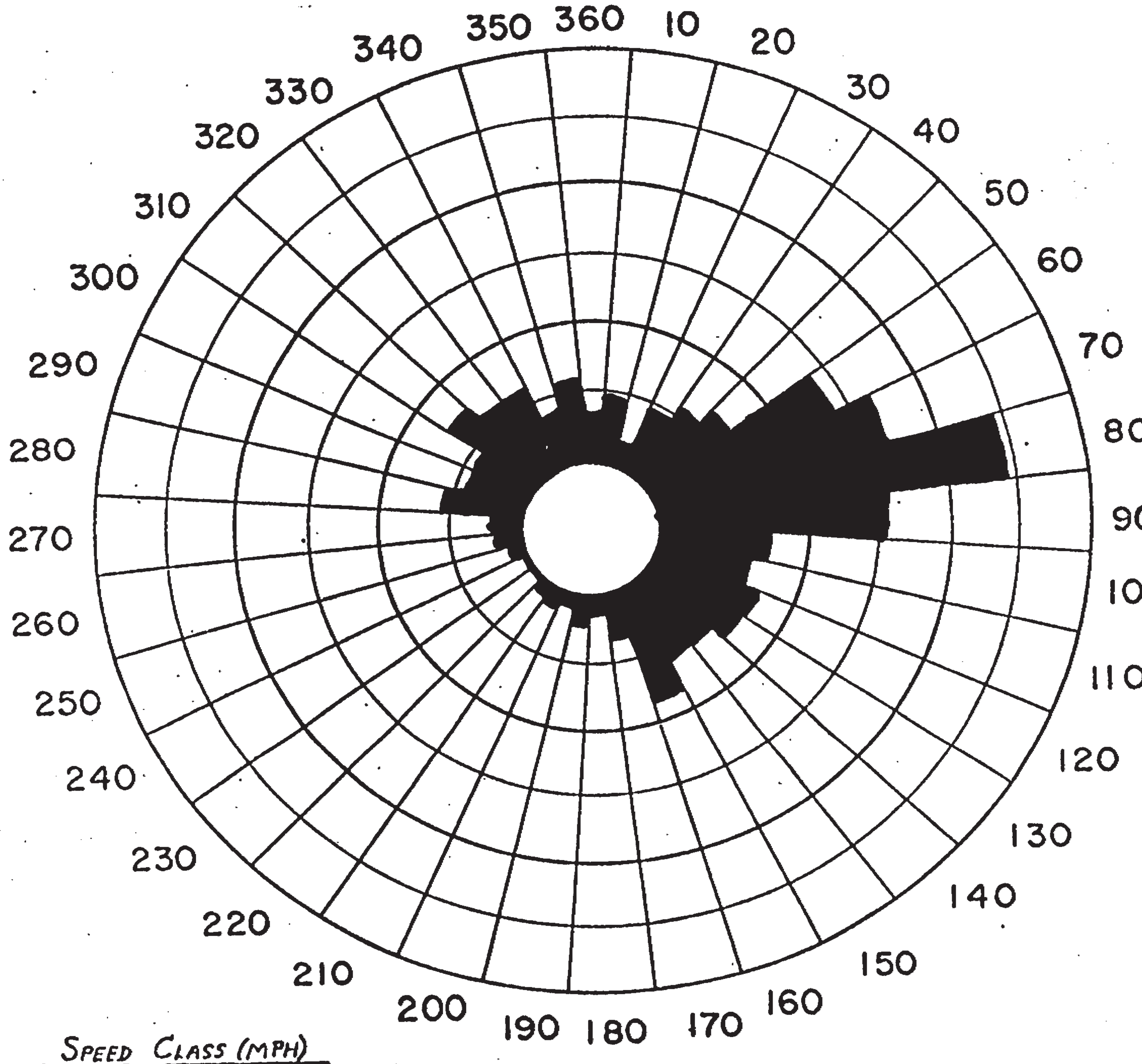


Speed Class (MPH)	Percent
0-3	5
4-7	12
8-12	33
13-18	36
19+	14

FIGURE 2A-14

Scale 1" = 5%

STATION *Turkey Point, Fla.*
HEIGHT *235 ft.*
PERIOD *March 1968*

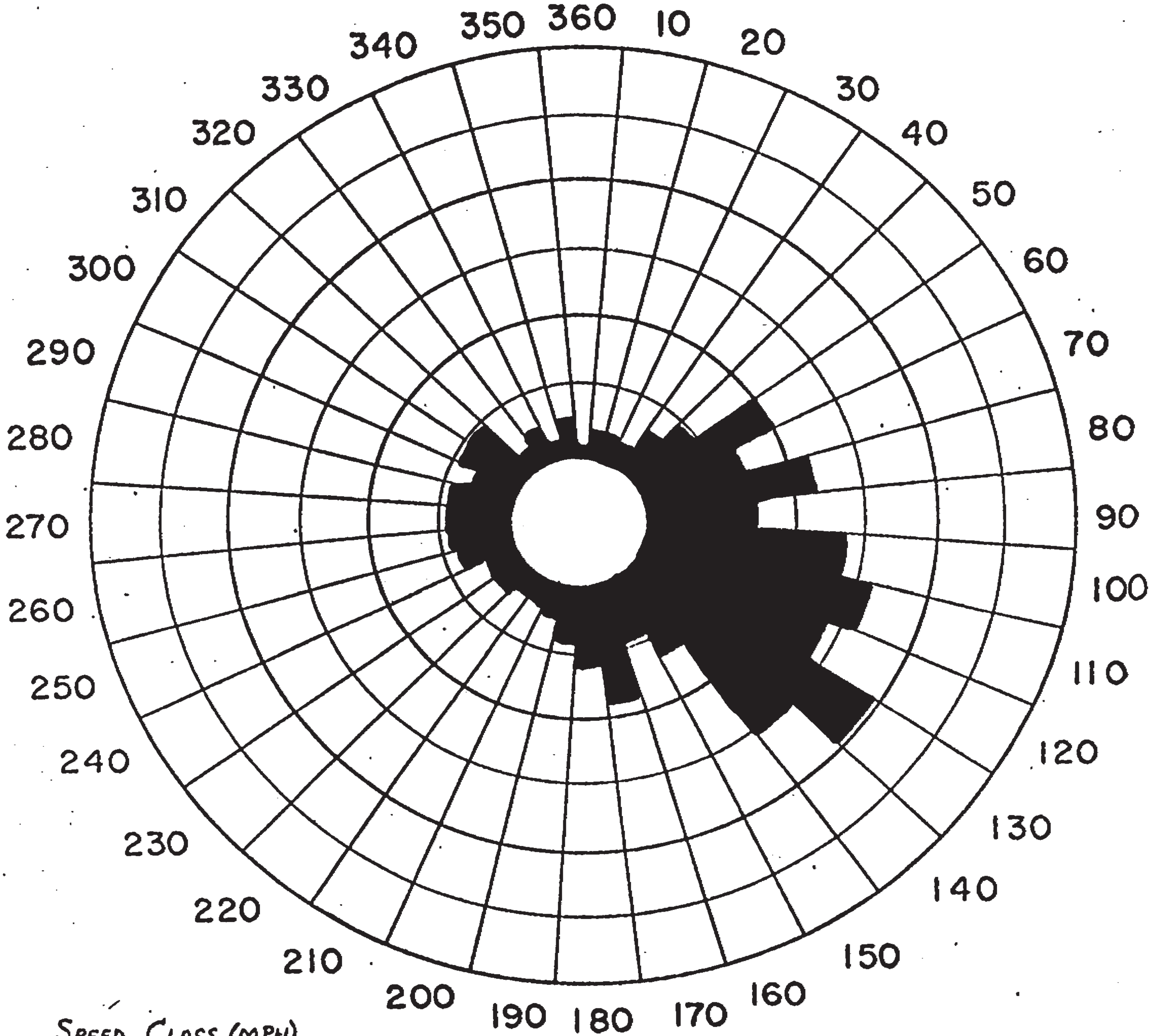


Speed Class (MPH)	Percent
0-3	0
4-7	2
8-12	22
13-18	39
19+	37

FIGURE 2A-15

Scale 1" = 5%

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD April 1968



Speed Class (MPH)	Percent
0-3	5
4-7	14
8-12	39
13-18	31
19+	10

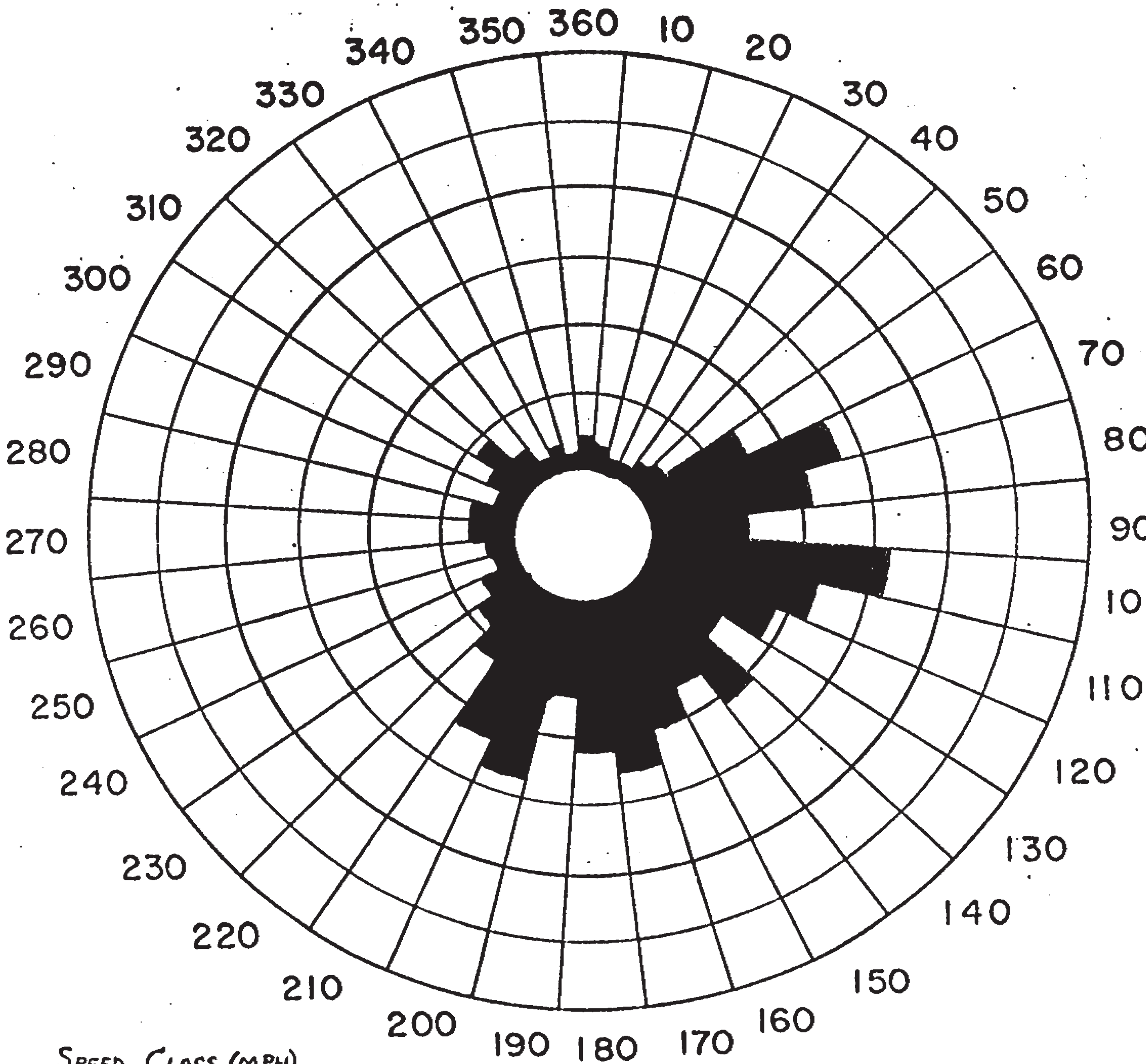
Scale 1" = 5%

FIGURE 2A-16

STATION *Turkey Point, Fla.*

HEIGHT *235 FT.*

PERIOD *May 1968*

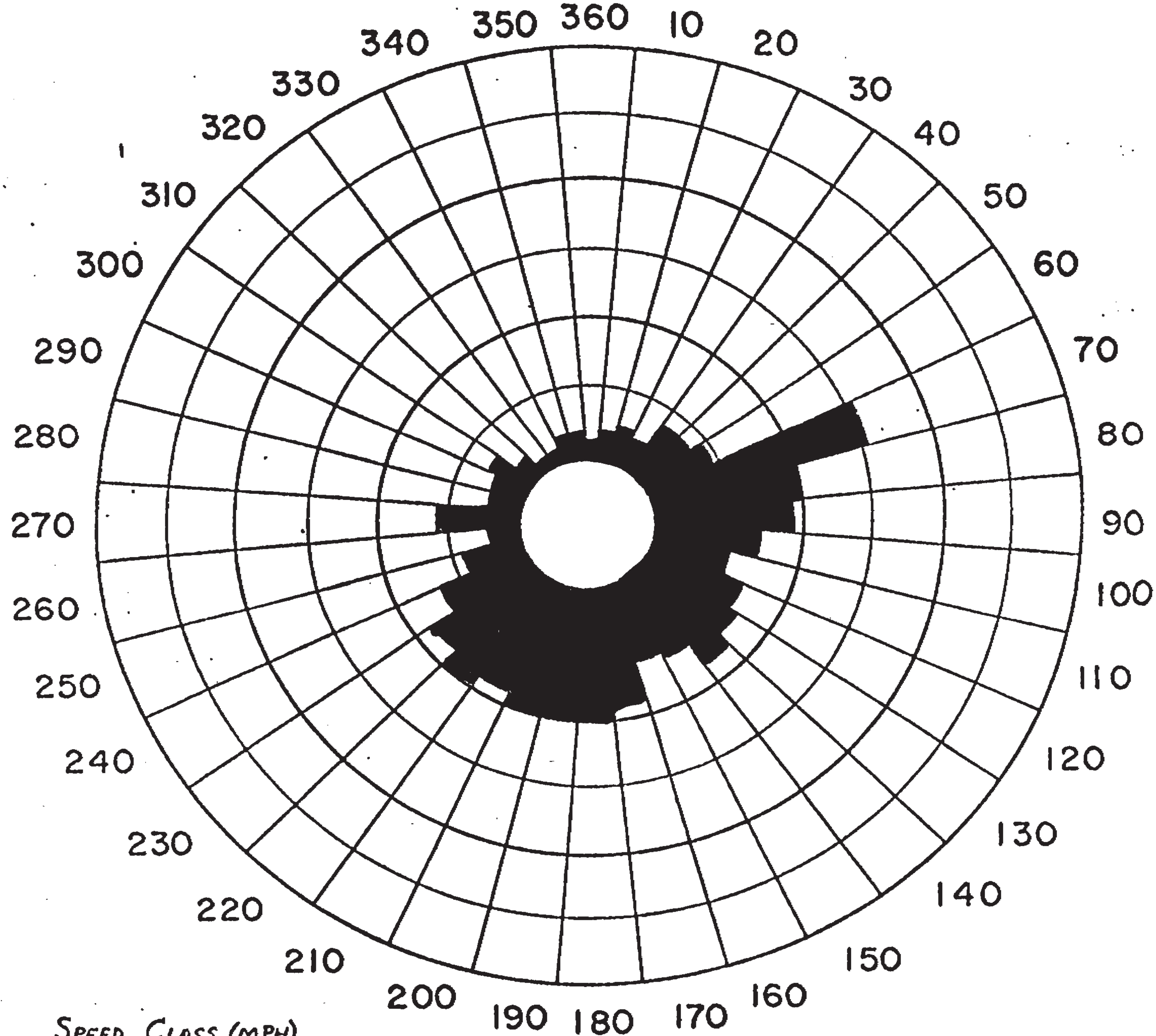


Speed Class (MPH)	Percent
0-3	4
4-7	16
8-12	34
13-18	31
19+	15

FIGURE 2A-17

Scale 1" = 5%

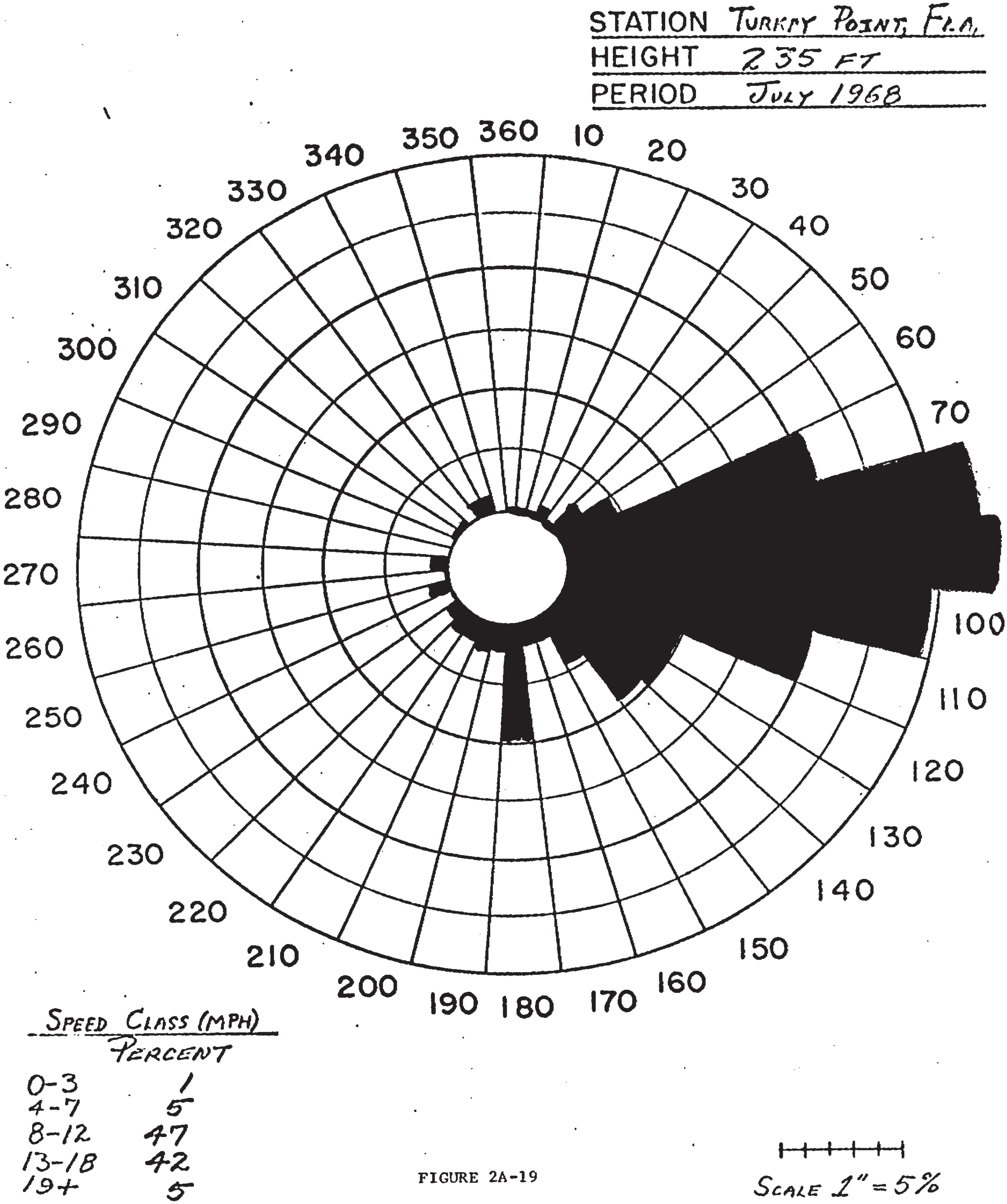
STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD June 1968



Speed Class (MPH)	Percent
0-3	2
4-7	13
8-12	42
13-18	25
19+	18

FIGURE 2A-18

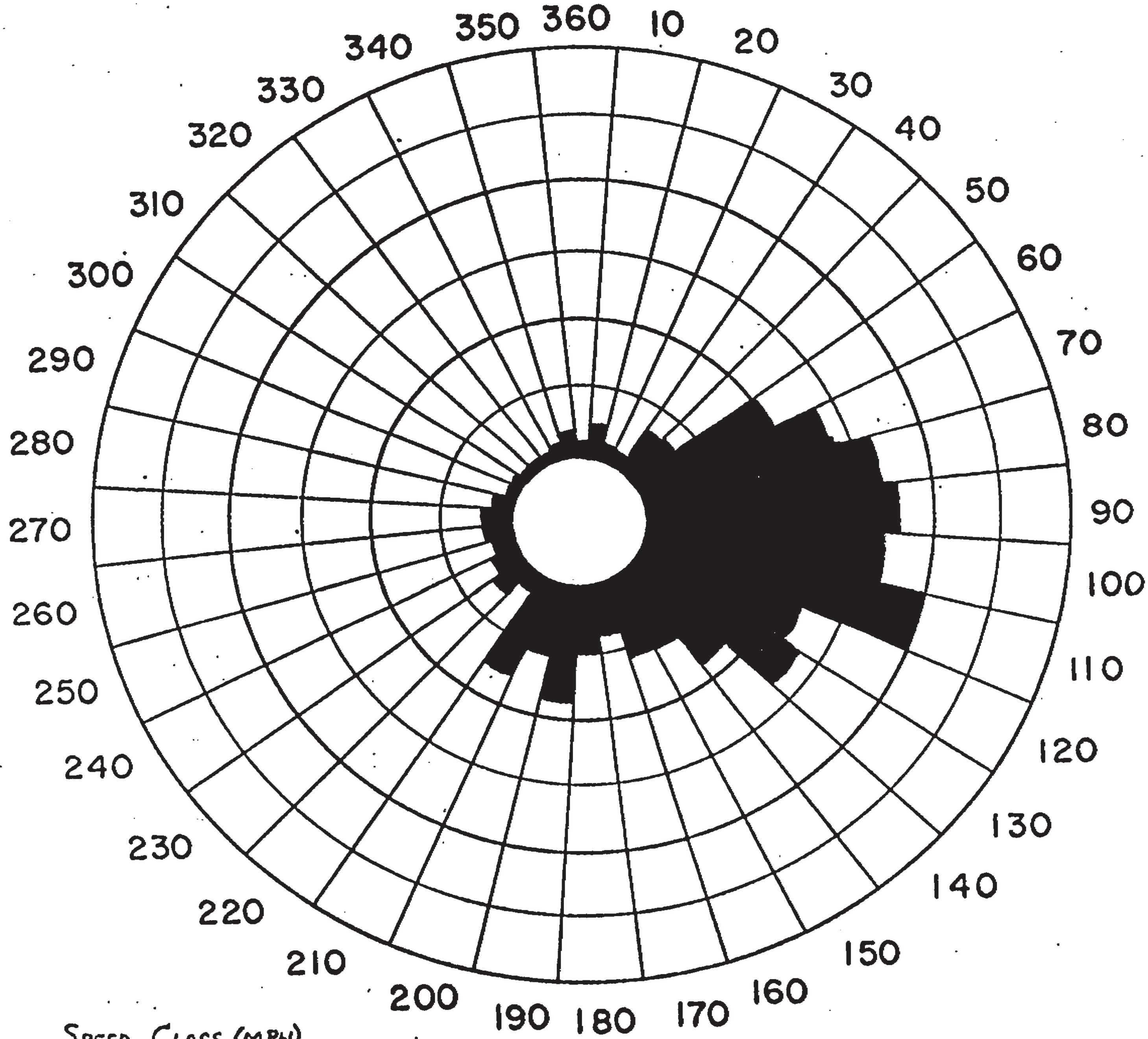
Scale 1" = 5%



STATION Turkey Point, Fla.
HEIGHT 235 FT
PERIOD July 1968
360
10
20
30
40
50
60
70
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
330
340
350
Speed Class (MPH)
Percent
0-3 1
4-7 5
8-12 47
13-18 42
19+ 5
Scale 1" = 5%

FIGURE 2A-19

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD August 1968

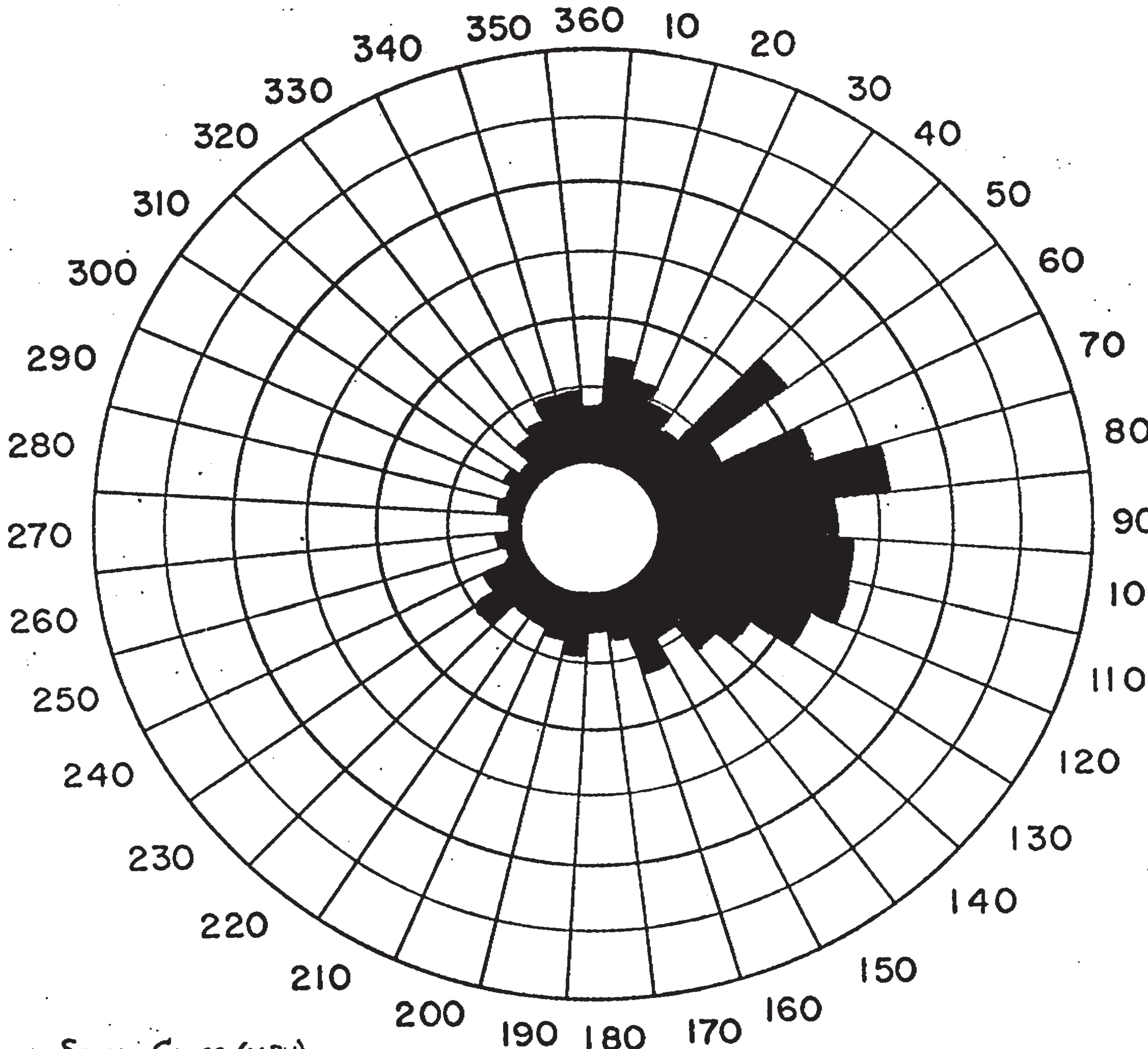


Speed Class (MPH)	Percent
0-3	7
4-7	19
8-12	49
13-18	23
19+	2

FIGURE 2A-20

Scale 1" = 5%

STATION *Turkey Point, Fla.*
HEIGHT *235 FT.*
PERIOD *September 1968*



SPEED CLASS (MPH)	PERCENT
0-3	7
4-7	17
8-12	47
13-18	24
19+	5

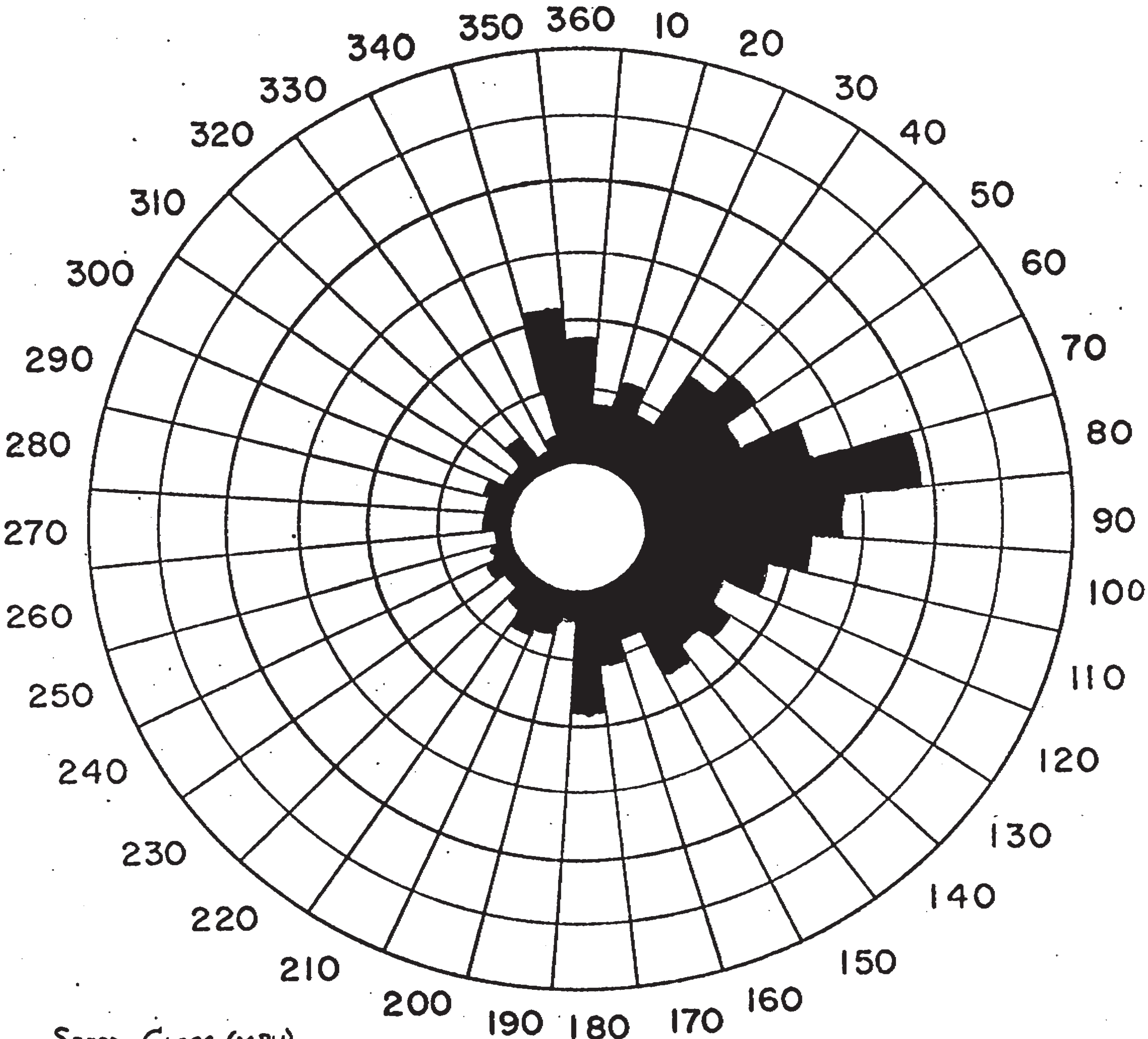
FIGURE 2A-21

SCALE 1" = 5%

STATION *Turkey Point, Fla.*

HEIGHT *235 FT.*

PERIOD *October 1968*

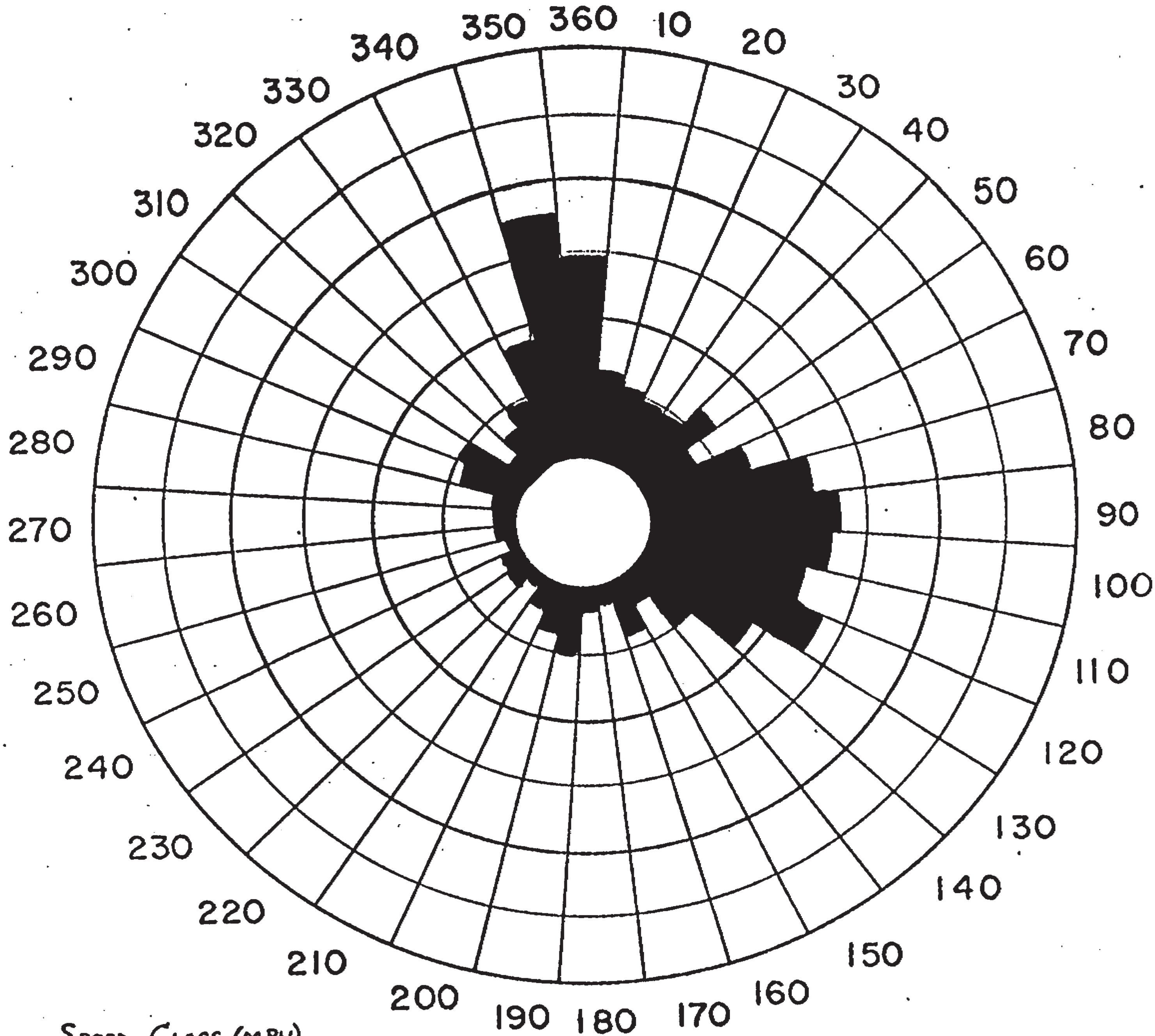


Speed Class (MPH)	Percent
0-3	1
4-7	9
8-12	38
13-18	26
19+	26

FIGURE 2A-22

Scale 1" = 5%

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD November 1968

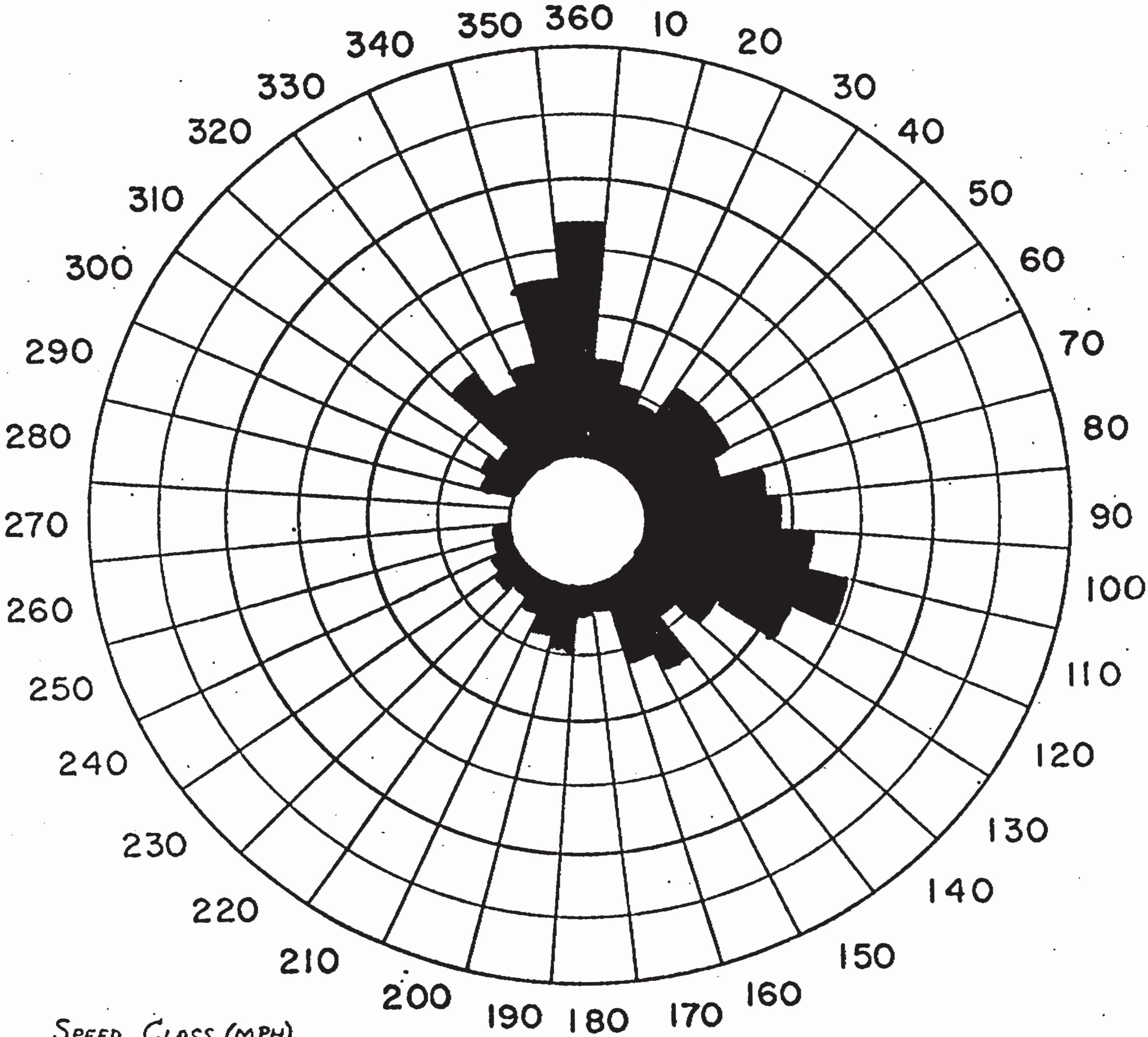


Speed Class (MPH)	Percent
0-3	2
4-7	7
8-12	26
13-18	43
19+	22

FIGURE 2A-23

Scale 1" = 5%

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD December 1968

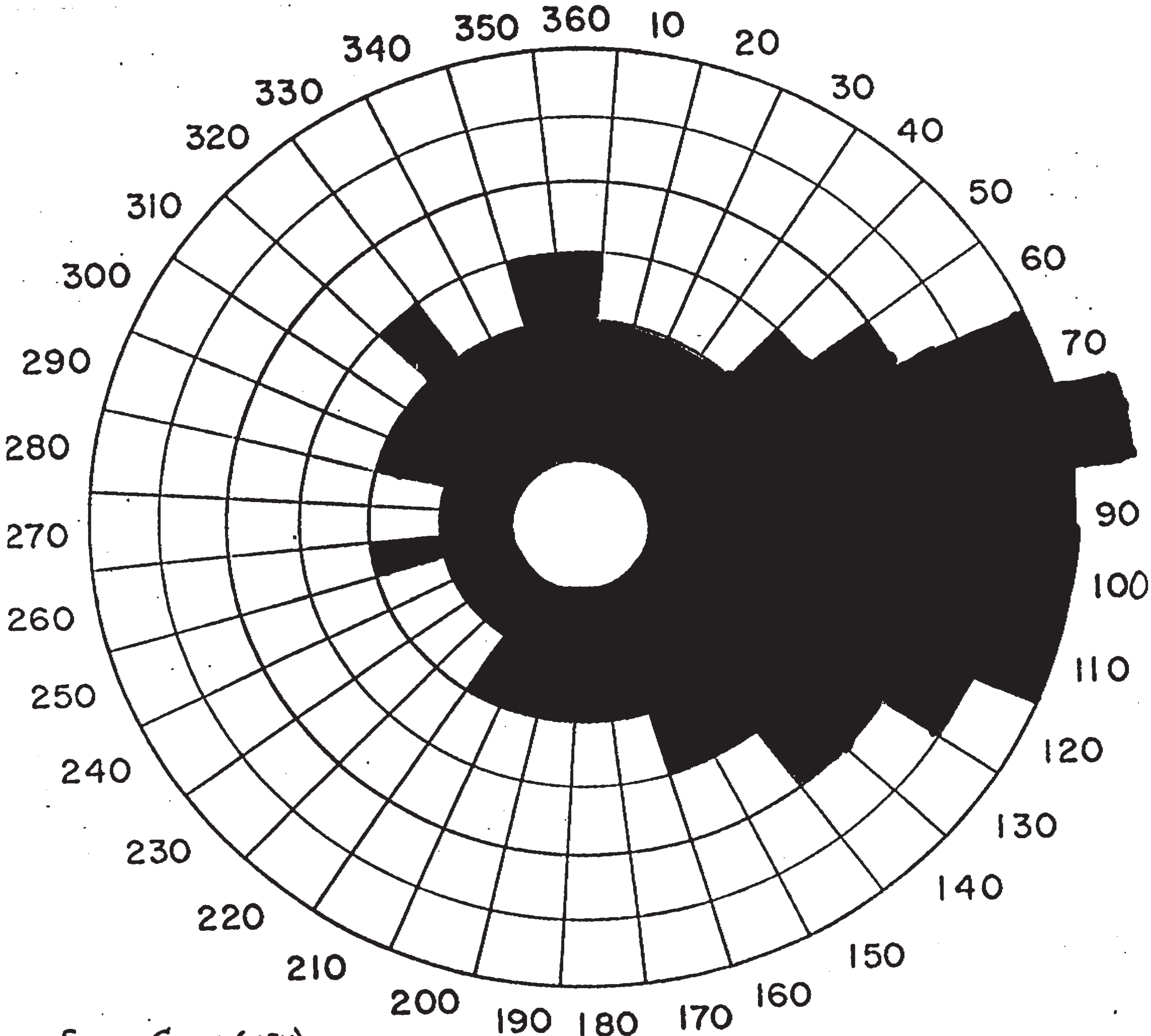


Speed Class (MPH)	Percent
0-3	2
4-7	5
8-12	29
13-18	45
19+	19

FIGURE 2A-24

Scale 1" = 5%

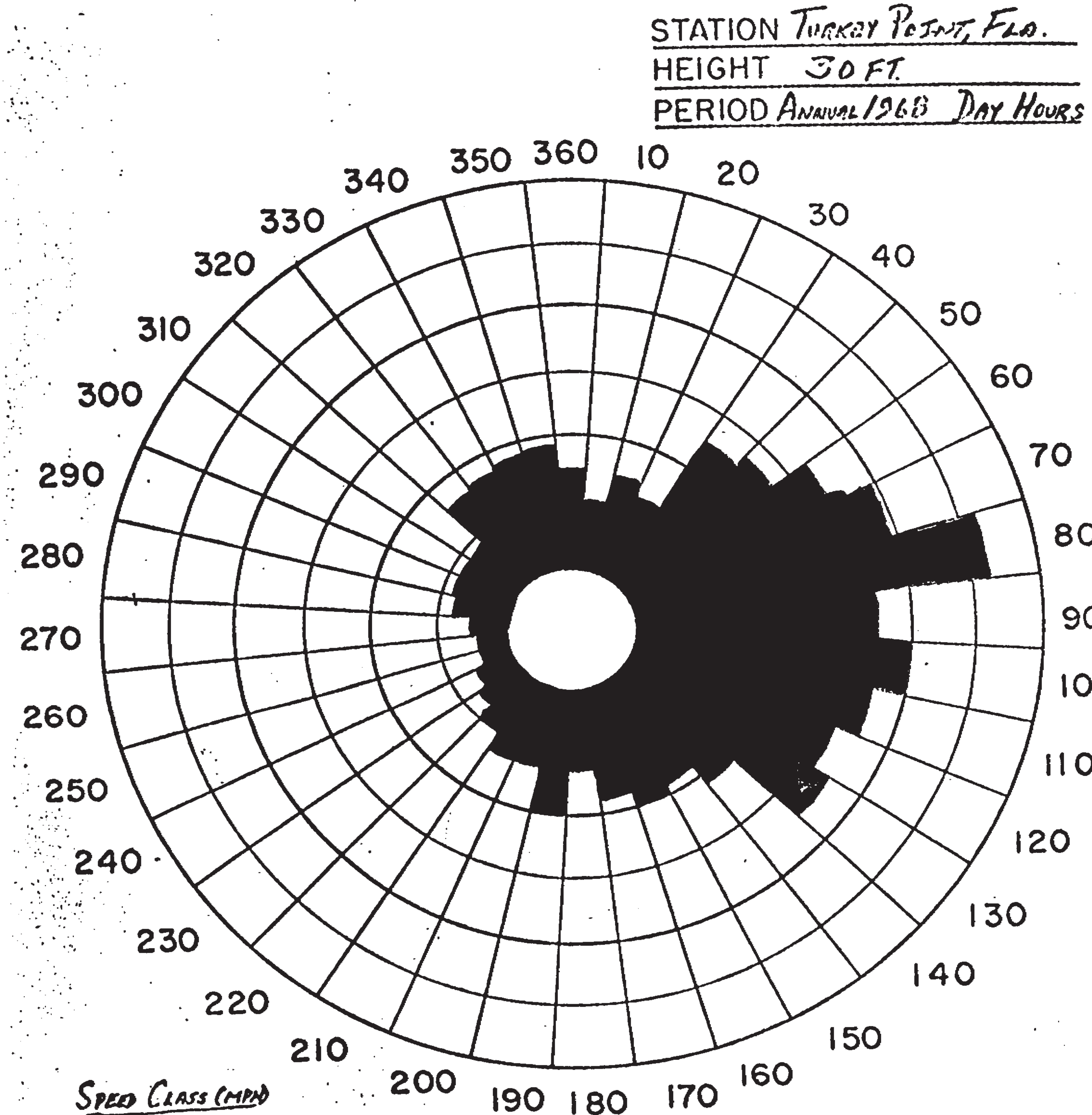
STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD Annual 1968



Speed Class (MPH)	Percent
0-3	3
4-7	11
8-12	37
13-18	33
19+	16

FIGURE 2A-25

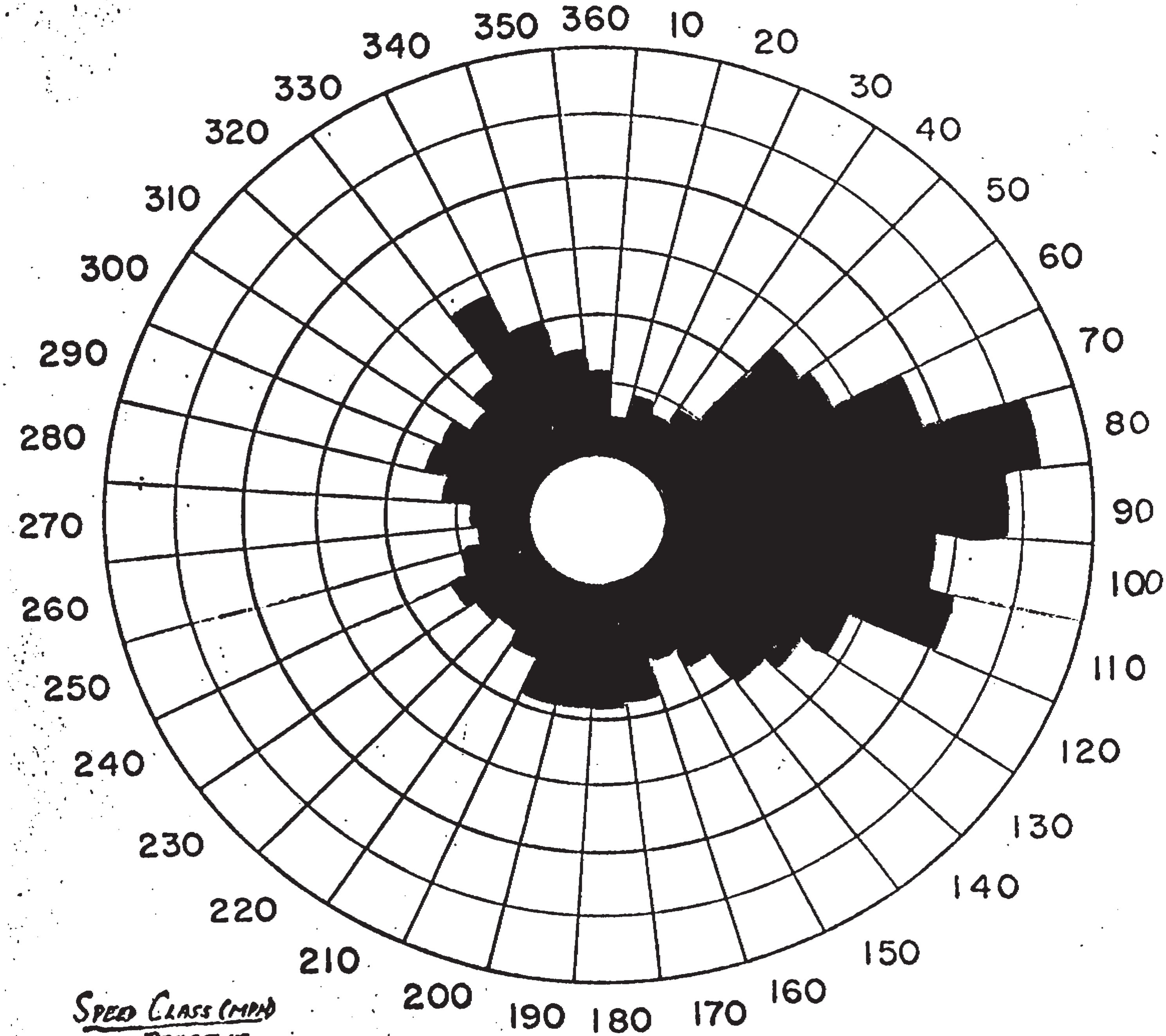
Scale 1" = 2%



Speed Class (MPH)	Percent
0-3	3
4-7	23
8-12	48
13-18	22
19+	4

FIGURE 2A-26

STATION Turkey Point, Fla.
HEIGHT 30 FT.
PERIOD Annual 1968 Night Hour

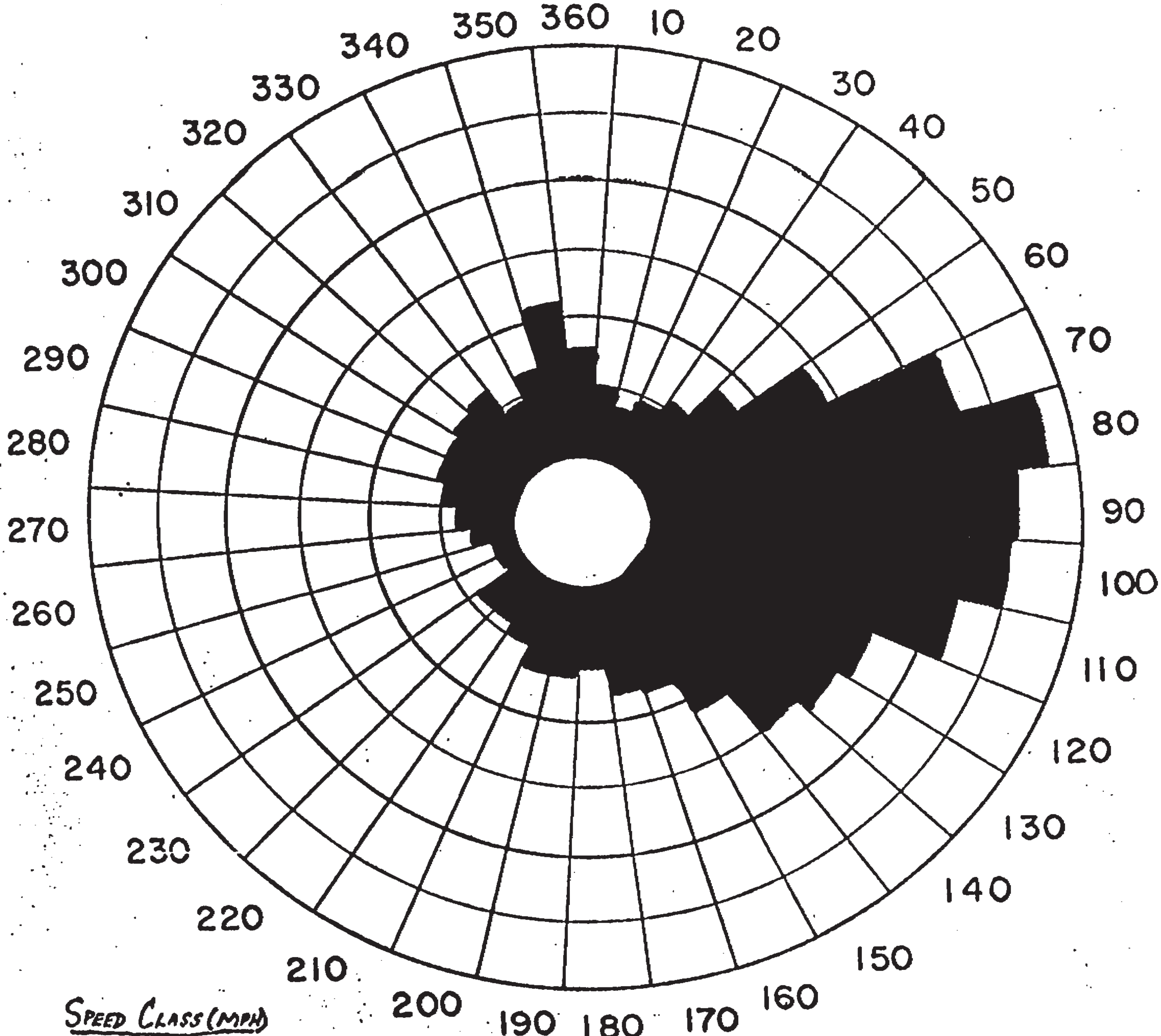


Speed Class (MPH)	Percent
0-3	6
4-7	30
8-12	42
13-18	18
19+	4

Scale 1" = 3%

FIGURE 2A-27

STATION Turkey Point, Fla.
HEIGHT 235 FT.
PERIOD Annual 1968 Class 2



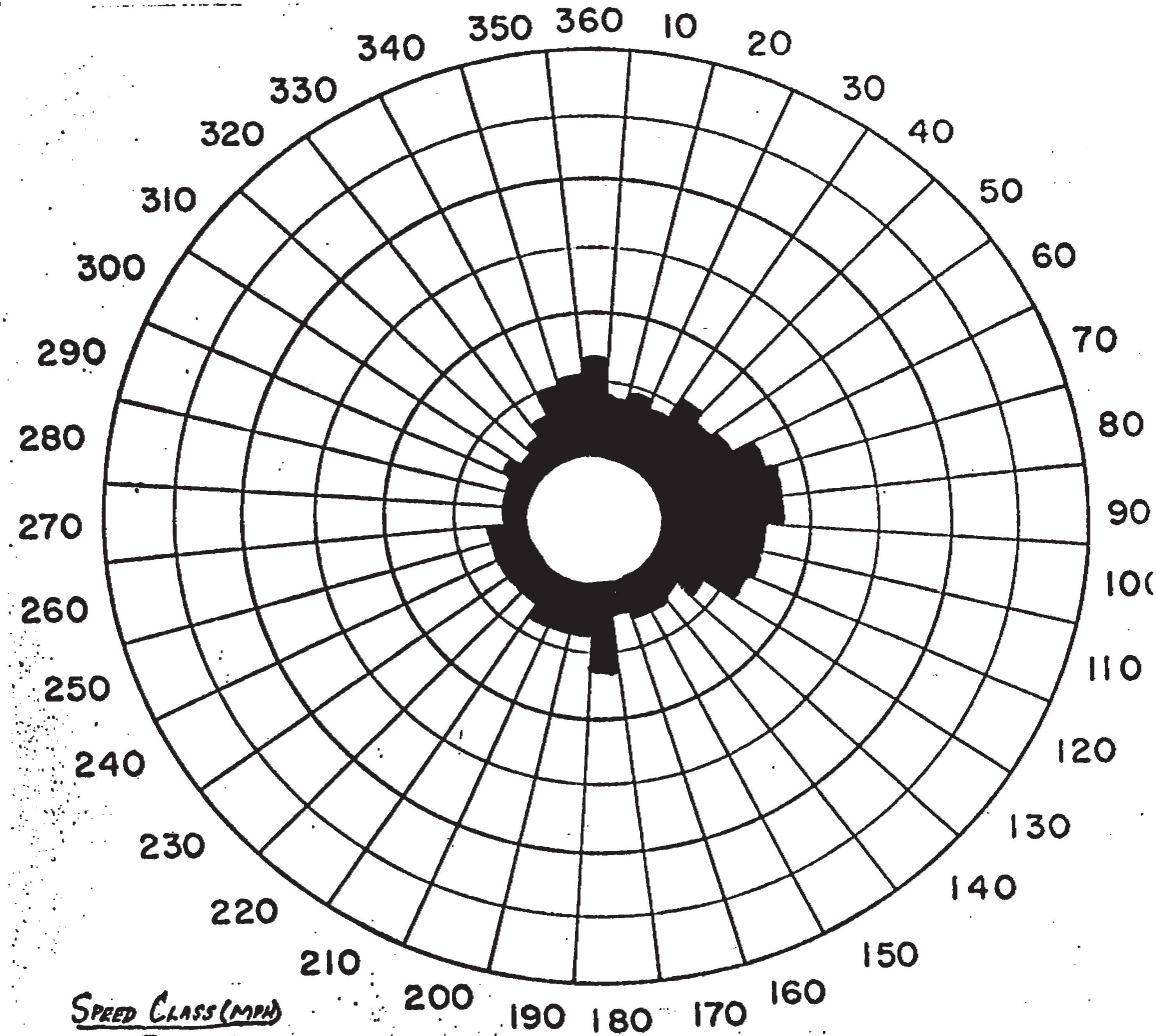
Speed Class (MPH)

	Percent
0-3	1
4-7	8
8-12	37
13-18	36
19+	18

FIGURE 2A-28

Scale 1" = 2%

STATION *Turkey Point, Fla.*
HEIGHT *235 FT.*
PERIOD *Annual 1968 Class 4*

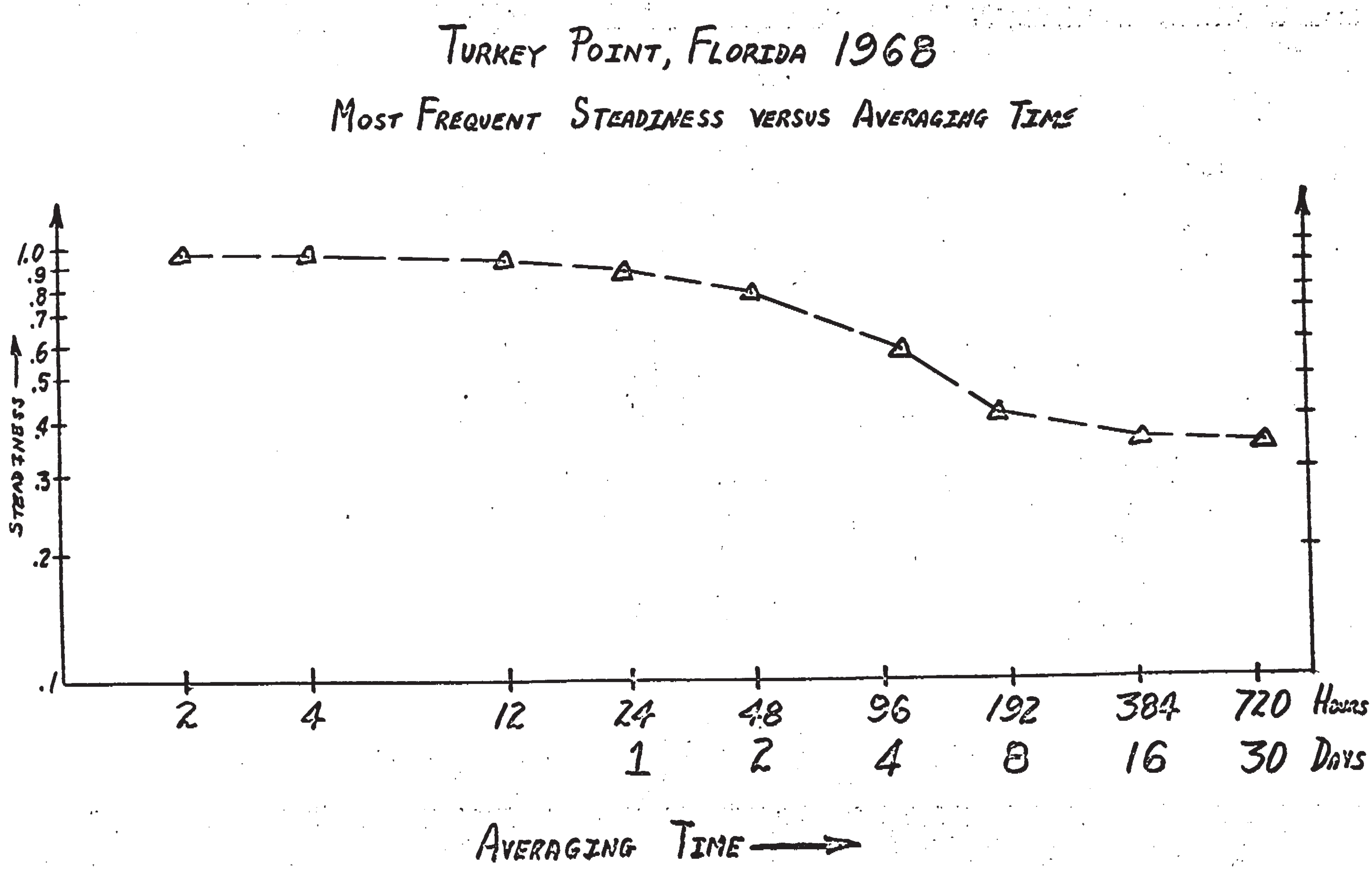


Speed Class (MPH)

	Percent
0-3	9
4-7	19
8-12	33
13-18	30
19+	9

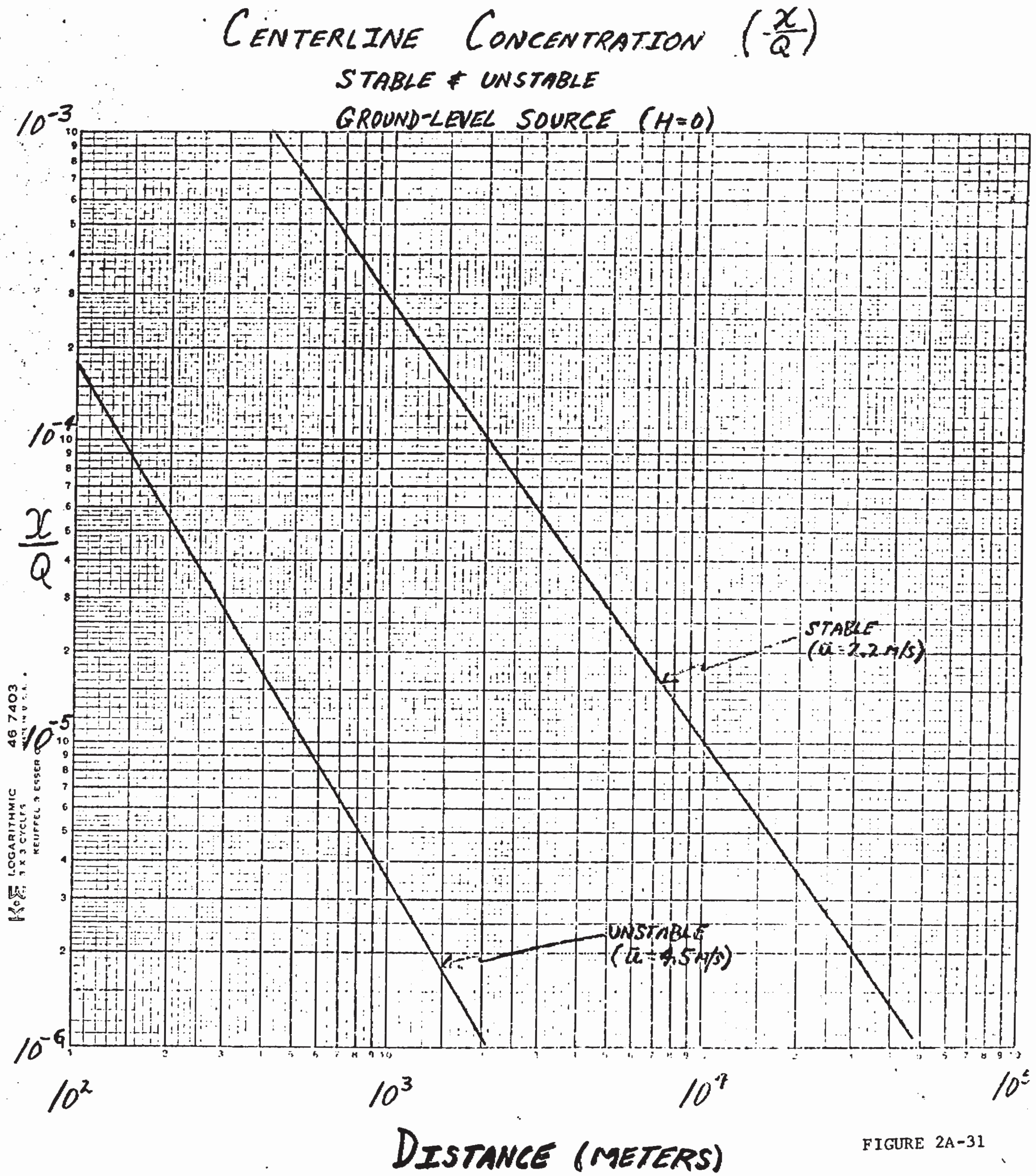
FIGURE 2A-29

Scale 1" = 2%



TURKEY POINT, FLORIDA 1968
MOST FREQUENT STEADINESS VERSUS AVERAGING TIME
STEADINESS
1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
2
4
12
24
48
96
192
384
720
HOURS
1
2
4
8
16
30
DAYS
AVERAGING TIME

FIGURE 2A-30



CENTERLINE CONCENTRATION ($\frac{\chi}{Q}$)
STABLE & UNSTABLE
GROUND-LEVEL SOURCE (H=0)
10^{-3}
10^{-4}
10^{-5}
10^{-6}
$\frac{\chi}{Q}$
STABLE ($\bar{u}$=2.2 m/s)
UNSTABLE ($\bar{u}$=4.5 m/s)
10^2
10^3
10^4
10^5
DISTANCE (METERS)
K&E LOGARITHMIC 46 7403 3 X 3 CYCLES KEUFFEL & ESSER CO. MADE IN U.S.A.

FIGURE 2A-31

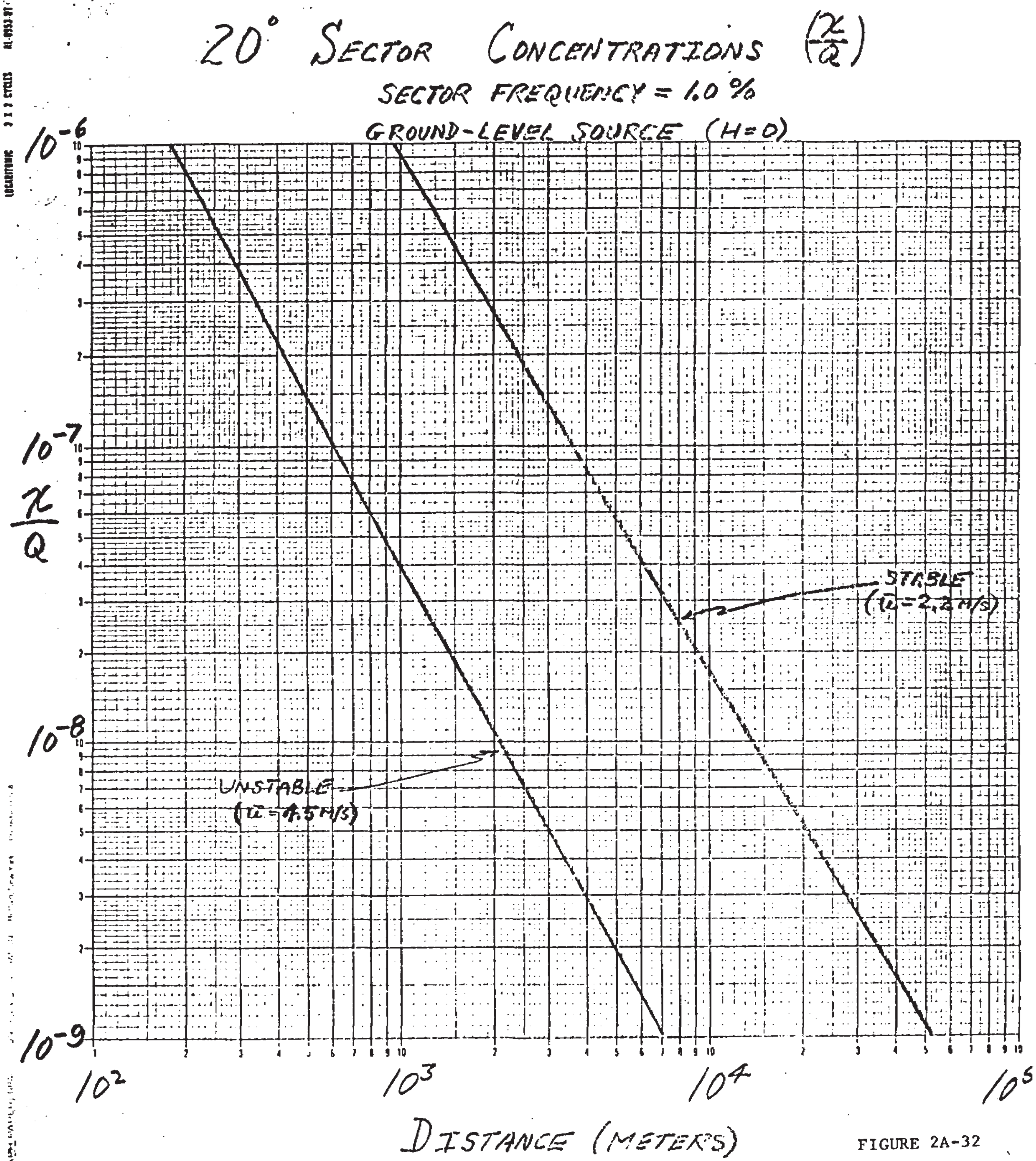
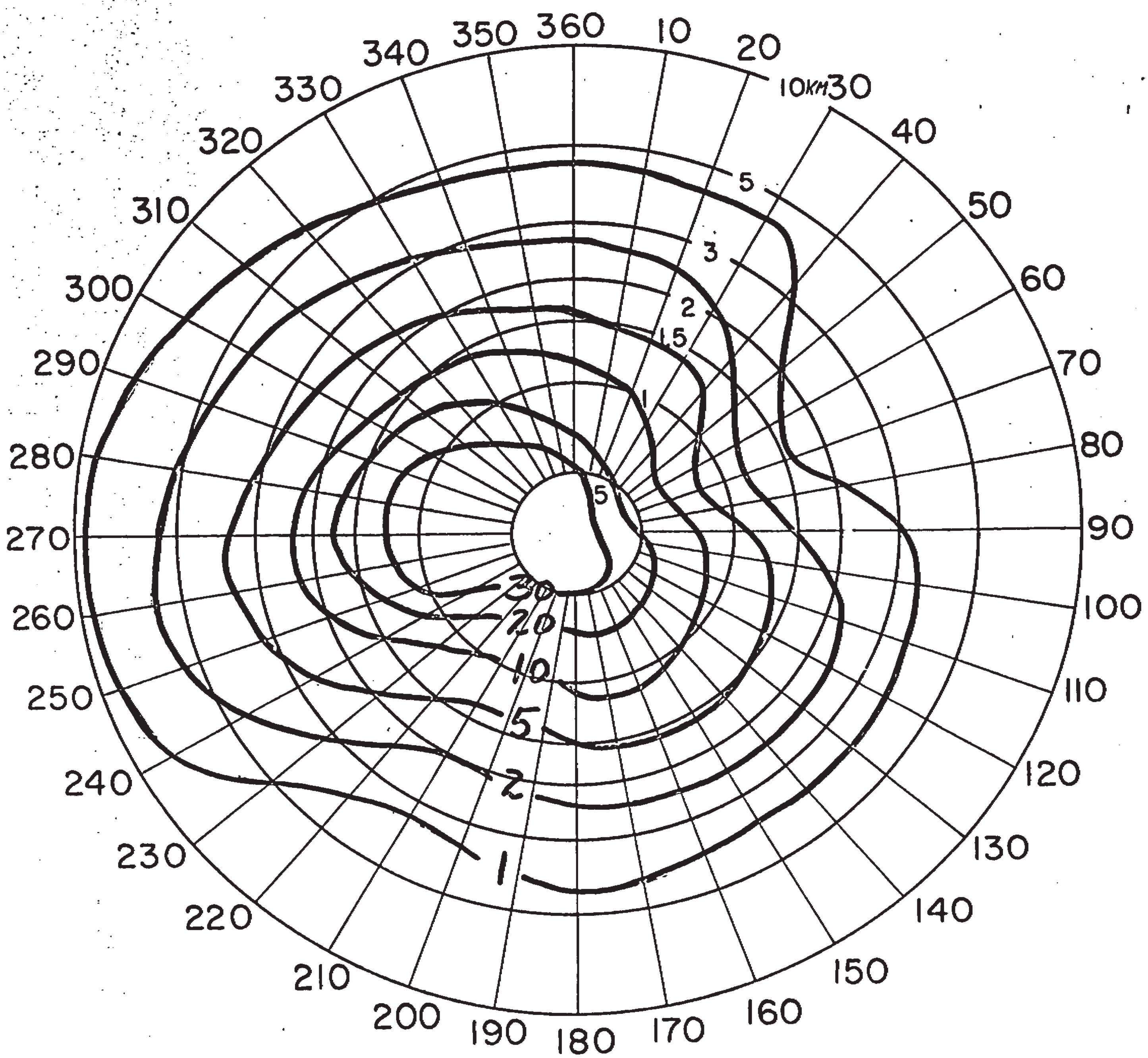

20° SECTOR CONCENTRATIONS (X/Q)
SECTOR FREQUENCY = 1.0 %
GROUND-LEVEL SOURCE (H=0)
10^{-6}
10^{-7}
10^{-8}
10^{-9}
X/Q
STABLE ($\bar{u}$=2.2 M/S)
UNSTABLE ($\bar{u}$=4.5 M/S)
10^{2}
10^{3}
10^{4}
10^{5}
DISTANCE (METERS)

FIGURE 2A-32

ANNUAL χ/Q UNSTABLE

GROUND-LEVEL SOURCE (H=0)

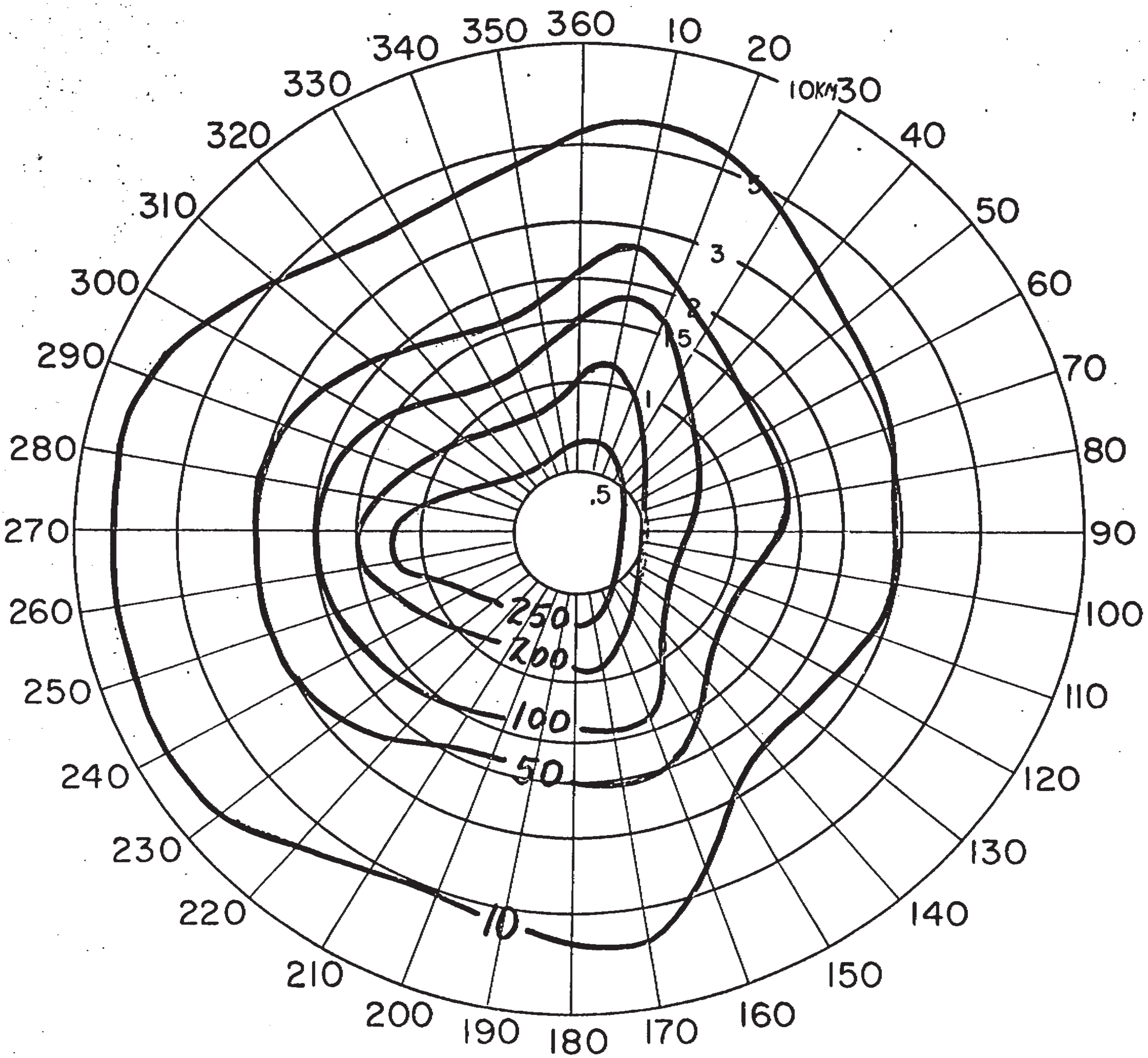


MULTIPLY VALUES BY 10^{-8}

FIGURE 2A-33

ANNUAL χ/Q STABLE

GROUND-LEVEL SOURCE (H=0)



MULTIPLY VALUES BY 10^{-6}

FIGURE 2A-34

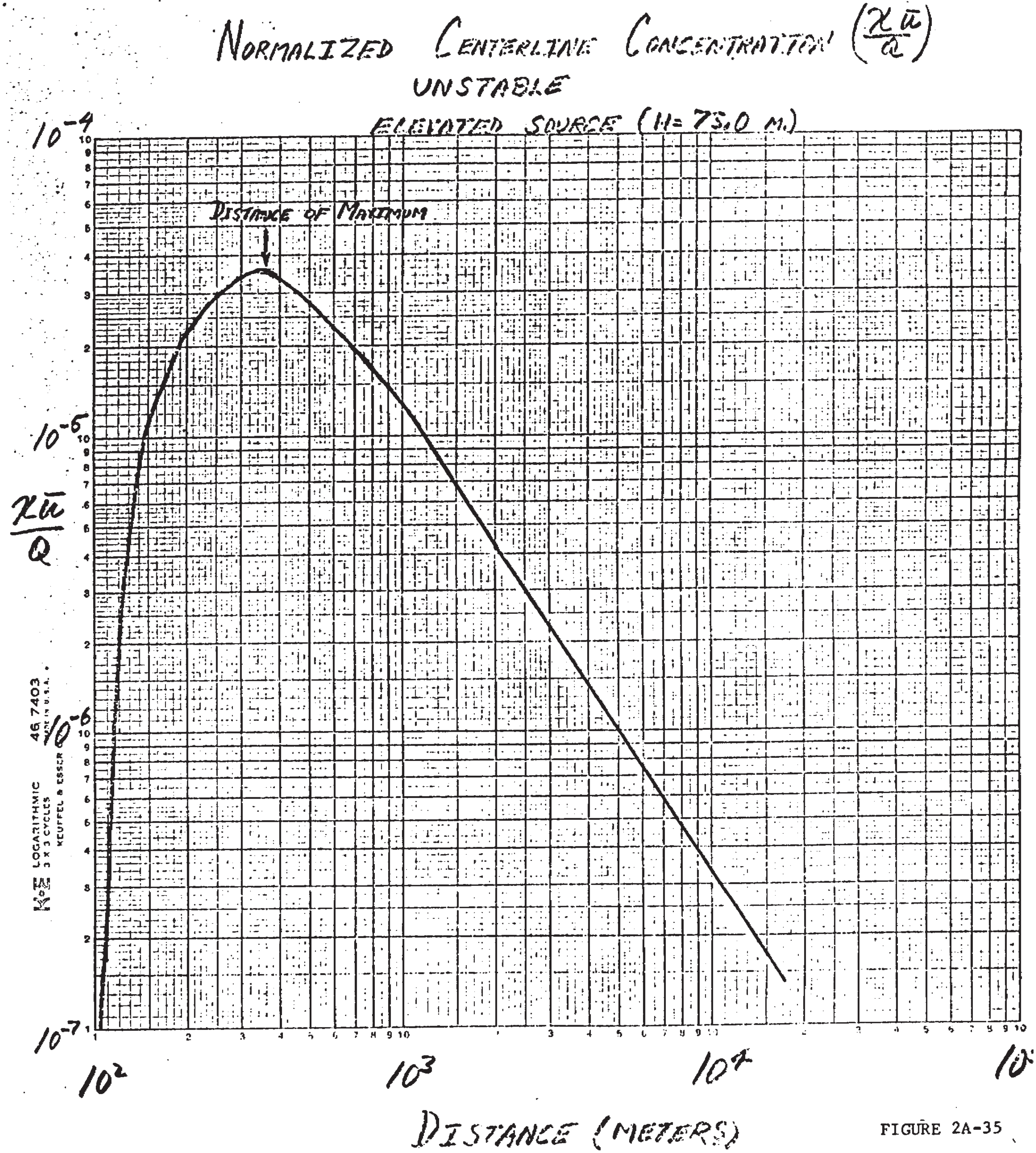

NORMALIZED CENTERLINE CONCENTRATION $\left(\frac{\chi \bar{u}}{Q}\right)$
UNSTABLE
ELEVATED SOURCE (H= 75.0 M.)
DISTANCE OF MAXIMUM
$\frac{\chi \bar{u}}{Q}$
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^{2}
10^{3}
10^{4}
DISTANCE (METERS)
46 7403
LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER

FIGURE 2A-35

NORMALIZED CENTERLINE CONCENTRATION $\left(\frac{\chi \bar{u}}{Q}\right)$

STABLE

ELEVATED SOURCE (H= 73.0 m.)

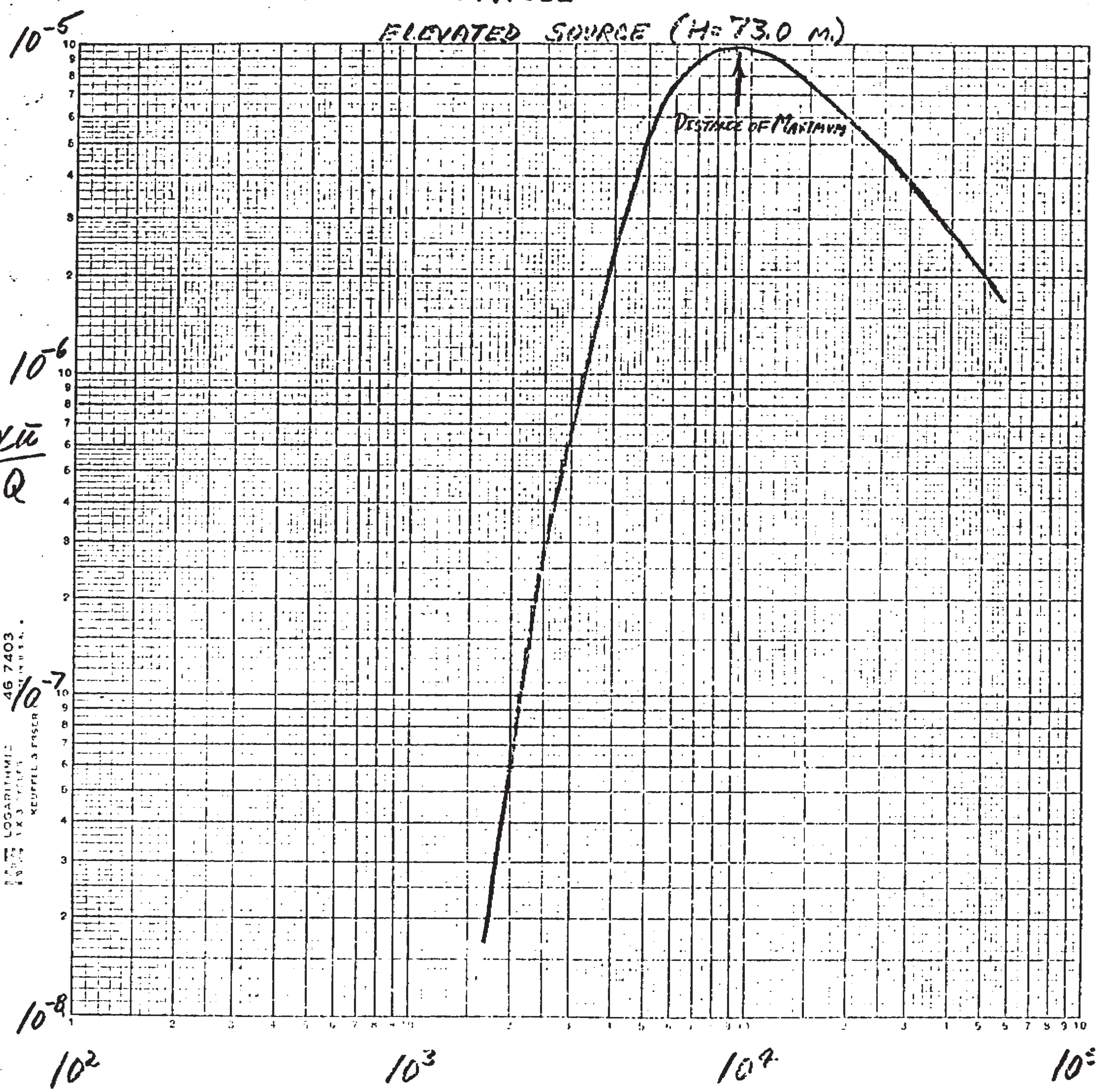
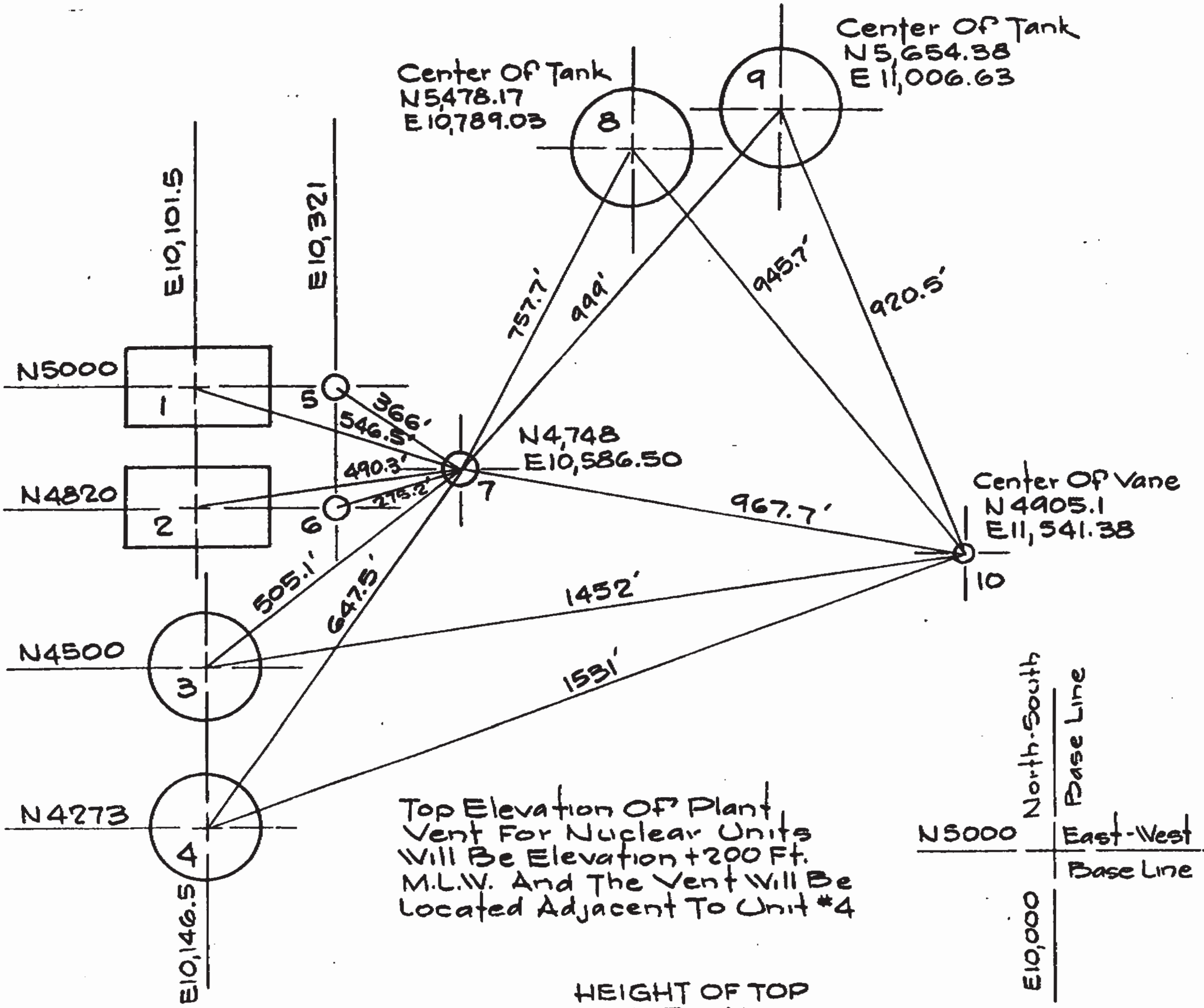


FIGURE 2A-36



Top Elevation Of Plant Vent For Nuclear Units Will Be Elevation +200 Ft. M.L.W. And The Vent Will Be Located Adjacent To Unit #4

	HEIGHT OF TOP ABOVE M.L.W. IN FEET
1. Unit #1 Boiler Structure	175
2. Unit #2 Boiler Structure	175
3. Unit #3 Containment	186
4. Unit #4 Containment	186
5. Unit #1 Stack	417
6. Unit #2 Stack	417
7. Elevated Water Tank Wind Vane	231 (Tank Top 218)
8. Unit #1 Fuel Oil Storage Tank	53
9. Unit #2 Fuel Oil Storage Tank	53
10. Ranger House Wind Vane	

WEATHER INSTRUMENT LOCATIONS

FIGURE 2A-37

APPENDIX 2B

MAXIMUM PROBABLE HURRICANE PARAMETERS

10812 ADMIRALS WAY
OTOMAC, MARYLAND 20854

TELEPHONE 299-5603
AREA CODE 301

RICHARD O. EATON, P.E.

MAILING ADDRESS
P.O. BOX 1246
ROCKVILLE, MARYLAND 20850

CONSULTING ENGINEER

July 3, 1968

Mr. Robert J. Gardner,
Executive Assistant,
Florida Power & Light Co.,
P. O. Box 3100,
Miami, Florida 33101

Dear Mr. Gardner:

Pursuant to your request I have had a review made of our prior study of maximum probable hurricane tidal flood heights at Turkey Point in the light of information presented in ESSA Memorandum HUR 7-97, May, 1968. While this memorandum is preliminary it will be used as a basis for evaluation by AEC as has already been evidenced by a request from AEC in the case of a nuclear power plant site at another location.

We are in general agreement with the evaluations reached in the Memorandum but we do not agree that all of the extreme values of the various variables could possibly occur concurrently. This concerns principally the relative values of the Central Pressure Index (C.P.I.) and the Normal Asymtotic Pressure which primarily govern the maximum wind velocity in the periphery of the storm. There is no existing evidence that the range of values of these parameters as suggested in the Memorandum can occur. We question the matter of whether it is technically honest or advantageous in the public interest to base design upon events which are fantastically remote.

The enclosed report by my associate, Mr. T. E. Haeussner, discusses these differences in viewpoint. I concur in his conclusion that there is no apparent basis for changing the values previously reached in our analysis of Maximum Probable Hurricane Criteria.

Sincerely,

SIGNATURE

Richard O. Eaton

ROE:w
cc R.E. Stade, Bechtel, w/enc.
Encl.

REVIEW OF MAXIMUM PROBABLE HURRICANE PARAMETERS

TURKEY POINT, FLORIDA NUCLEAR POWER PLANT

A pre-publication copy of a preliminary ESSA Memorandum HUR 7-97, "Interim Report - Meteorological Characteristics of the Probable Maximum Hurricane, Atlantic and Gulf Coasts of the United States", which presents estimates of generalized indices for that storm, was reviewed for comparison with the M.P.H. parameters and parametric relationships contained in Enclosures 2 and 3 to the P.S.A.R. for Turkey Point. Based on that review, the following observations and conclusions are offered.

1. Based on various techniques of analysis, the ESSA Memorandum concluded that..."south of 25° N. latitude, the CPI for the M.P.H. must be somewhere between 25.70 inches and 26.25 inches." On page A-23 of ref. Encl. 3 the CPI range selected for analysis was from 25.60 inches to 26.16 inches: a <u>very favorable</u> comparison. The CPI recommended in Table 1 of ESSA Memo. for latitude 25.5° N. (approximately that of Turkey Point) is 26.07 inches, which is <u>less severe</u> than the 25.60 inch CPI used and recommended in Encl. 3 to obtain the 16.7 ft. MSL maximum wind tide elevation at the plant site.

2. Several relationships are presented in the ESSA emo. for evaluating the asymptotic pressure p_n in the MPH, as well as an evaluation of K, the parameter employed in the determination of maximum gradient wind speed. The method given for selecting p_n

relates that parameter to latitude; for latitude 25.5° N. a p_n value of 31.3 inches is suggested. Expressed in millibars pressure that value would represent a 1060 mb. pressure. The Bermuda High core pressure in about 1026 mb. In ref. Encl. 3 the <u>normal</u> asymptotic pressure of 29.92 inches was used, which corresponds to that observed in the most severe hurricane of record for the eastern seaboard...that of September 1935 which had an observed p_n of 29.92 inches and p_o of 26.35 inches. The ESSA Memo however, states that a standard peripheral pressure of 29.92 inches <u>can be used</u> to estimate V_x (maximum wind speed). Use of a p_n value of 31.3 inches, in lieu of 29.92 inches would increase the overwater wind speed from 139 mph (for 25.60 inches p_o), to as much as 160 mph (for a 26.07) inch p_o or a 15% increase. There are several valid objections to the use of the p_n vs latitude relation noted in the ESSA Memo. The first is from a <u>meteorological probability of occurrence</u> standpoint, ie., the presence of postulation of a 1060 mb. pressure area in the south Atlantic ocean off the Florida Coast would be in itself, an event of extremely rare probability. The second objection is that it has not been conclusively demonstrated or proven that extremely high p_n values can occur with severe hurricanes having p_o values of from 25.5-26.6 inches. Lastly, the final objection relates to the fact that although the ESSA p_n vs latitude relationship was based on an envelopy curve of some 70+ p_o values for storms occurring from latitude 24.5°-42° N., only 2 of those storms even closely approached the constructed envelope curve and those were not for severe storms. It is therefore recommended that the p_n value of 29.9 inches used in the Turkey Point MPH analysis not be changed.

3. The value for "K" recommended in the ESSA Memo. is purportedly based on the variation of ocean surface temperatures with latitude. For latitude 25.5° N. a value of 76.8 is suggested, as compared with the normal value of 73, used in all previous computations for determining the maximum gradient wind speed. The value of 76.8 is related to a required ocean temperature of 90.8°F. In ref. Encl. 3 (pages A-17-18) a discussion of probable ocean surface temperatures was presented which stated that a violent hurricane with CPI of 25.50 inches would require a temperature of 89+°F. over an 8 degree circle of latitude to maintain steady state conditions. While highly improbable of occurrence, if such a condition were to be accepted the resulting increase in maximum wind speeds at the radius of maximum winds R, would be on the order of 5% (73 vs 76.8), or about 7-8 mph. That difference is considered to be negligible and more than compensated for by the use of a 25.60 inch CPI in the Turkey Point Report.

In summary, the undersigned recommends that no change is warranted or necessary in the MPH analysis for the Turkey Point Nuclear Power Plant site.

Respectfully submitted,

SIGNATURE

Theodore E. Haeussner
Hydraulic Engineer, Consultant

June 28, 1968

APPENDIX 2C

OCEANOGRAPHY

FINAL SAFETY ANALYSIS REPORT

FIGURE 2C-1

REFER TO ENGINEERING DRAWING

5610-C-1168, SHEET 1

REV. 16 (10/99)

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT PLANT UNITS 3 & 4

COOLING CANAL SYSTEM LAYOUT

FIGURE 2C-1

APPENDIX 2D

METEOROLOGICAL DATA

APPENDIX 2D

METEOROLOGICAL DATA

Meteorological data has been collected at the Turkey Point site for 1968 through 1970. The data have been analyzed independently of the material presented in Appendix 2B.

2D.1 AVERAGE ANNUAL DILUTION FACTOR

The average annual dilution factors (X/Q) are shown in Table 2D-1.1 for the site boundary distance and 5 mile distance for each 10 degree sector for each year. Also, the average annual dilution factors are shown in Figure 2D-1 for the site boundary distance.

These dilution factors for each sector are exact in the sense that they are based on summations of real X/Q values for each hour for a year. The following computational technique was used.

The collected data from Turkey Point was evaluated by a trained reader and tabulated in hourly averages. The stability classification was made on a judgment of the wind direction variability, and in uncertain situations of directional variability, the classification was made in accordance with the temperature differential. For instance, in the 15th hour in January 1, 1968, the wind was 6 mph at the 30' elevation, the stability was Class 2, and the temperature gradient (235-30') was -2.2°F. The wind was blowing from the 140 degree sector into the 320 degree sector.

Based on this input information the following X/Q values were computed for this particular hourly period using a Gaussian distribution:

1. 2.347×10^{-6} sec/m^3 in sector 320 (at the site boundary) based on the Gaussian centerline value.
2. 1.290×10^{-6} sec/ms^3 in sectors 310 and 330 (at the site boundary) based on the value at 10 degrees away from the Gaussian centerline.
3. 1.578×10^{-7} sec/m^3 in sector 320 (at 5 miles) based on the Gaussian centerline value.
4. 0.595×10^{-7} sec/m^3 in sectors 310 and 330 (at 5 miles) based on the value at 10 degrees away from the Gaussian centerline.
5. All other sectors had a X/Q of zero for this hourly period. The classification of wind stability (or gust number) is described on Page 4 of Appendix 2A, given as Classes 1, 2, 3, and 4. Class 2 is the typical unstable daytime regime and Class 4 is the stable condition representative of the nocturnal regime. For calculational simplicity and conservatism, Classes 1 and 3 were considered to be Class 2.

The following values of sigma were used, taken from Table 17 in Appendix 2A. For Class 2, unstable condition:

$$\sigma_y = 0.45 \times (\text{downwind distance})^{0.86}$$

$$\sigma_z = 0.32 \times (\text{downwind distance})^{0.86}$$

For Class 4, stable condition:

$$\sigma_y = 0.37 \times (\text{downwind distance})^{0.71}$$

$$\sigma_z = 0.38 \times (\text{downwind distance})^{0.71}$$

The dilution factor (X/Q) for each hour was computed with the use of the first equation given in Table 14. 3.5-5 for the centerline value. The X/Q for adjacent sectors, 10 degrees from the centerline, was computed with the use of the correction factor as shown in equation 3.116, page 99, "Meteorology and Atomic Energy 1968" (Reference 14 in Appendix 2A). For the Class 4, stable condition, the Gaussian plume is concentrated within a single 10 degree sector, and the X/Q in adjacent sectors is negligible. All computations were based on a ground level release and a ground level receptor. For the few situations of zero wind speed, the X/Q was computed on the basis of 1 mph moving in the direction of the next recorded wind direction.

The average annual X/Q for each 10 degree sector was computed by summing all the hourly X/Q values for the sector and dividing by the total number of hourly observations in all of the sectors for a given year. Missing data is excluded from the determination of the average value.

2D.2 TABLES ON WIND SPEED vs. STABILITY

Information on 30 foot wind speed versus stability is given for each 10 degree sector and for all sectors combined. The 1968 data are given in Tables 2D-2.1 through 2D-2.37. The 1969 data are given in Tables 2D-4.1

through 2D-4.37. The 1970 data are given in Tables 2D-6.1 through 2D-6.37. For the few situations of zero wind speed the data were categorized in the direction of the next recorded wind direction.

2D.3 TABLES ON WIND SPEED vs. TEMPERATURE GRADIENT

Information on 30 foot wind speed versus temperature gradient (temperature at 235 ft. minus temperature at 30 ft.) is given for each 10 degree sector and for all sectors combined. The 1968 data are given in Tables 2D-3.l through 2D-3.37. The 1969 data are given in Tables 2D-5.l through 2D-5.37. The 1970 data are given in Tables 2D-7.1 through 2D-7.37. As previously stated, for the few situations of zero wind speed the data were categorized in the direction of the next recorded wind direction.

2D.4 DEFINITION OF ONSHORE WINDS

For Appendix 2A onshore winds are defined as those winds which blow over long stretches of water before intersecting land at Turkey Point. The sector comprising the onshore winds was selected to be the included angle from 030 to 210 degrees clockwise, 180 degrees total. Winds from the other 180 degrees are called offshore winds. Refer to the General Location Map, Figure 2.2-1, which illustrates the general direction of the shoreline for many miles.

For Appendix 2D onshore winds are defined slightly differently since the objectives of the two appendices are different. Onshore winds for 2D are defined as those winds which blow over the plant location and blow into onshore sectors. Referring to Figure 2D-1, the Turkey Point site is divided into 36 ten-degree sectors. Twenty of the sectors (illustrated by arrows on the figure) intersect the plant site boundary and are defined onshore. In this context the onshore winds include a total of 200 degrees. Sixteen of the sectors project into Biscayne Bay and are defined offshore.

2D.5 PROBABILITY OF OCCURRENCE OF SELECTED SIGMA A'S

Table 17 in Appendix 2A gives representative diffusion parameters for Turkey Point based upon (1) a qualitative analysis of 1968 on-site data, and upon (2) accepted principles of atmospheric diffusion behavior (Reference 1, page 54).

The representative σa is given in round numbers as 3 degrees for the stable case, actually, equation (1) of Table 17 results from the use of a σa value of 2.5 degrees. A value of 2.5 degrees is also in agreement with the definition of the stable case (class 4) as given on page 4 of Appendix 2A. (σa direction range /6 = 15°/6 = 2.5°).

The representative σa for the unstable case is given in round numbers as 10 degrees, and equation (3) of Table 17 is based on a σa of this amount. This representative value for σa typically includes classes 1, 2, and 3 as described on page 4 of Appendix 2A.

Experimental values from Turkey Point data on direction range (maximum trace width) measurements have been reviewed to determine the adequacy of the two above representative σa's. Beginning on January 1, 1970, in the Turkey Point data reduction program, the maximum trace width for each hour at 235 feet has been compiled from the strip charts by a reader. The value of σa is then determined by dividing by 6 (Ref. 1, page 54).

Data taken from January 1, 1970, through April 30, 1970, have been analyzed. Referring first to the stable case, σa was observed to be 2.5 degrees or less 45% of the time, and more than 2.5 degrees 55% of the time. The overall average σa was about 3 degrees. Referring to the unstable case, σa was observed to be less than 10 degrees 75% of the time. The overall average σa was about 8 degrees. These numbers for both the stable and unstable cases should be considered as tentative only, since a minimum of a whole year of data is required for a reasonably conclusive analysis.

Experimental measurements of σa were made in an extensive meteorological program at Cape Kennedy in support of the space flight programs. Cape Kennedy is about 225 miles north of Turkey Point and the terrain characteristics are similar; therefore, one would anticipate the local diffusion characteristics to be very similar. Reference 2 reports values of σa measured at an elevation of 18 meters. Figures 2D-2 and 2D-3 are reproductions of Figures 2-13 and 2-14 from Ref. 2. The following discussion on these two figures is quoted from Ref. 2, page 43:

"Figure 2-13 has been prepared to provide estimates of σ_A for general application at the Kennedy Space Center under various wind speed and stability conditions. To prepare the curves, the median 18-meter direction ranges were plotted against the temperature difference between the 00- and 30- meter levels of the tower for each of four wind speed categories, using the data for all time periods, both seasons, and all wind directions except northerly. Winds from the northerly sector were excluded because of the possibility of crossover problems mentioned above. The wind direction range scales of the working plots were converted to σ_A by means of the one-sixth scaling factor. The dependence of the wind direction range on stability is strongest during light winds and decreases with increasing wind speed. Very stable conditions do not occur with strong winds at the 18-meter level, and the curve for winds of 7 to 11 meters per second extends only to conditions of slight stability. As might be expected, the range data show a large amount of scatter. An example of the plots from which the curves were prepared is shown in Figure 2-14. The curves shown in Figures 2-13 and 2-14 were drawn through median values within selected ΔT intervals."

A definition of stable and unstable is given in Ref. 1, page 54, as: stable case is when $\Delta T/\Delta Z$ is positive, and unstable case is when $\Delta T/\Delta Z$ is negative or isothermal. Interpreting the Fig. 2D-2 data on this basis of stable v.s. unstable, during stable conditions the mean σa varies from 3 1/2 degrees to 9 degrees, and during unstable conditions the mean σa varies from 9 degrees to 15 degrees or more.

In summary of the stable condition, the partial year Turkey Point data indicates that the σa is larger than 2.5°, 55% of the time, and the Cape Kennedy data shows that the mean σa is 3.5° or larger. Therefore, the value of 2.5° (or 3° rounded off in Table 17) is a conservative representative value of σa for the Turkey Point data analysis.

In summary on the unstable condition, the partial year Turkey Point data indicates that the σa has an average value of 8°, and the Cape Kennedy data shows that the mean σa is 9 to 15°. Therefore, the value of 10° is a suitable representative value.

References

(1) Maynard Smith, Recommended Guide for the Prediction of the Dispersion of Airborne Effluents, American Society of Mechanical Engineers, May 1968.

(2) F.A. Record, R. N. Swanson, H. E. Cramer, and R. K. Dumbauld, Analysis of Lower Atmospheric Data for Diffusion Studies, NASA CR-61327, by GCA Corporation, for Marshall Space Flight Center, April 1970.

Table 2D-1.1

Average Annual Dilution Factor (X/Q)

Sector Degrees downwind	Site Boundary 1968	Site Boundary 1969	Site Boundary 1970	Site Boundary 3-yr Average
10	Offshore	Offshore	Offshore	Offshore
20	"	"	"	"
30	"	"	"	"
40	"	"	"	"
50	"	"	"	"
60	"	"	"	"
70	"	"	"	"
80	"	"	"	"
90	"	"	"	"
100	"	"	"	"
110	"	"	"	"
120	"	"	"	"
130	"	"	"	"
140	"	"	"	"
150	"	"	"	"
160	"	"	"	"
170	0.4777×10^{-6}	0.9006×10^{-6}	0.7964×10^{-6}	0.7551×10^{-6}
180	0.6323×10^{-6}	0.7138×10^{-6}	0.7494×10^{-6}	0.7087×10^{-6}
190	0.1664×10^{-6}	0.2431×10^{-6}	0.2272×10^{-6}	0.2238×10^{-6}
200	0.4482×10^{-6}	0.5458×10^{-6}	0.4312×10^{-6}	0.4734×10^{-6}
210	0.6095×10^{-6}	0.2824×10^{-6}	0.5404×10^{-6}	0.4751×10^{-6}
220	0.4057×10^{-6}	0.3097×10^{-6}	0.4526×10^{-6}	0.3971×10^{-6}
230	0.4091×10^{-6}	0.2153×10^{-6}	0.2864×10^{-6}	0.2995×10^{-6}
240	0.3629×10^{-6}	0.1545×10^{-6}	0.2911×10^{-6}	0.2647×10^{-6}
250	0.2593×10^{-6}	0.1854×10^{-6}	0.1566×10^{-6}	0.1969×10^{-6}
260	0.3277×10^{-6}	0.1850×10^{-6}	0.1968×10^{-6}	0.2308×10^{-6}
270	0.5433×10^{-6}	0.3389×10^{-6}	0.3757×10^{-6}	0.4122×10^{-6}
280	0.3821×10^{-6}	0.1950×10^{-6}	0.2752×10^{-6}	0.2785×10^{-6}
290	0.5396×10^{-6}	0.3735×10^{-6}	0.3686×10^{-6}	0.4178×10^{-6}
300	0.5394×10^{-6}	0.6856×10^{-6}	0.3749×10^{-6}	0.5392×10^{-6}
310	0.4796×10^{-6}	0.4969×10^{-6}	0.3060×10^{-6}	0.4377×10^{-6}
320	0.6753×10^{-6}	0.4874×10^{-6}	0.4359×10^{-6}	0.5372×10^{-6}
330	0.7868×10^{-6}	0.4750×10^{-6}	0.2002×10^{-6}	0.4790×10^{-6}
340	0.5426×10^{-6}	0.5877×10^{-6}	0.2761×10^{-6}	0.4821×10^{-6}
350	0.8836×10^{-6}	0.6554×10^{-6}	0.4549×10^{-6}	0.6372×10^{-6}
360	1.2359×10^{-6}	1.0630×10^{-6}	0.8226×10^{-6}	1.0234×10^{-6}
Average of 20 sectors	0.5353×10^{-6}	0.4547×10^{-6}	0.4009×10^{-6}	0.4635×10^{-6}

Average Annual Dilution Factor (X/Q)

Sector Degrees downwind	5 Miles 1968	5 Miles 1969	5 Miles 1970	5 Milesn 3-yr Average
10	$1.5422x10^{-7}$	$0.8930x10^{-7}$	$0.8941x^{-7}$	$1.0754x10^{-7}$
20	$1.6708x10^{-7}$	$1.1738x10^{-7}$	$0.8321x^{-7}$	$1.1913x10^{-7}$
30	$0.8484x10^{-7}$	$1.3521x10^{-7}$	$1.7483x10^{-7}$	$1.3590x10^{-7}$
40	$0.8033x10^{-7}$	$1.9325x10^{-7}$	$1.2652x10^{-7}$	$1.3842x10^{-7}$
50	$1.1586x10^{-7}$	$1.8720x10^{-7}$	$0.9379x10^{-7}$	$1.3302x10^{-7}$
60	$0.8179x10^{-7}$	$1.5477x10^{-7}$	$1.4557x10^{-7}$	$1.3139x10^{-7}$
70	$0.5272x10^{-7}$	$1.0992x10^{-7}$	$0.5346x10^{-7}$	$0.7352x10^{-7}$
80	$0.7234x10^{-7}$	$1.0551x10^{-7}$	$1.2131x10^{-7}$	$1.0164x10^{-7}$
90	$0.7689x10^{-7}$	$1.7884x10^{-7}$	$1.8029x10^{-7}$	$1.5045x10^{-7}$
100	$0.8326x10^{-7}$	$1.3920x10^{-7}$	$1.1368x10^{-7}$	$1.1492x10^{-7}$
110	$0.9927x10^{-7}$	$2.0139x10^{-7}$	$1.6453x10^{-7}$	$1.5997x10^{-7}$
120	$1.6697x10^{-7}$	$2.0077x10^{-7}$	$1.7061x10^{-7}$	$1.8027x10^{-7}$
130	$1.0130x10^{-7}$	$2.1019x10^{-7}$	$1.2179x10^{-7}$	$1.4812x10^{-7}$
140	$1.2464x10^{-7}$	$1.7533x10^{-7}$	$1.5473x10^{-7}$	$1.5423x10^{-7}$
150	$1.9975x10^{-7}$	$2.3925x10^{-7}$	$2.6051x10^{-7}$	$2.3653x10^{-7}$
160	$1.5888x10^{-7}$	$1.3789x10^{-7}$	$1.1702x10^{-7}$	$1.3702x10^{-7}$
170	$0.6146x10^{-7}$	$1.1945x10^{-7}$	$1.0519x10^{-7}$	$0.9827x10^{-7}$
180	$0.8167x10^{-7}$	$0.9285x10^{-7}$	$0.9725x10^{-7}$	$0.9133x10^{-7}$
190	$0.2090x10^{-7}$	$0.3110x10^{-7}$	$0.2885x10^{-7}$	$0.2759x10^{-7}$
200	$0.6304x10^{-7}$	$0.7656x10^{-7}$	$0.6021x10^{-7}$	$0.6675x10^{-7}$
210	$0.9503x10^{-7}$	$0.4269x10^{-7}$	$0.8337x10^{-7}$	$0.7209x10^{-7}$
220	$0.7342x10^{-7}$	$0.5537x10^{-7}$	$0.8129x10^{-7}$	$0.7002x10^{-7}$
230	$0.8921x10^{-7}$	$0.4613x10^{-7}$	$0.6132x10^{-7}$	$0.6379x10^{-7}$
240	$1.0936x10^{-7}$	$0.4563x10^{-7}$	$0.8731x10^{-7}$	$0.7862x10^{-7}$
250	$1.2858x10^{-7}$	$0.9196x10^{-7}$	$0.7668x10^{-7}$	$0.9697x10^{-7}$
260	$1.6246x10^{-7}$	$0.8923x10^{-7}$	$0.9391x10^{-7}$	$1.1174x10^{-7}$
270	$1.5496x10^{-7}$	$0.9527x10^{-7}$	$1.0518x10^{-7}$	$1.1566x10^{-7}$
280	$1.0887x10^{-7}$	$0.5232x10^{-7}$	$0.7513x10^{-7}$	$0.7647x10^{-7}$
290	$1.3606x10^{-7}$	$0.9086x10^{-7}$	$0.8882x10^{-7}$	$1.0263x10^{-7}$
300	$0.9454x10^{-7}$	$1.2065x10^{-7}$	$0.6282x10^{-7}$	$0.9270x10^{-7}$
310	$0.6834x10^{-7}$	$0.7018x10^{-7}$	$0.4023x10^{-7}$	$0.5920x10^{-7}$
320	$0.8214x10^{-7}$	$0.5651x10^{-7}$	$0.4892x10^{-7}$	$0.6114x10^{-7}$
330	$0.8364x10^{-7}$	$0.4712x10^{-7}$	$0.1520x10^{-7}$	$0.4594x10^{-7}$
340	$0.5067x10^{-7}$	$0.5497x10^{-7}$	$0.2248x10^{-7}$	$0.4221x10^{-7}$
350	$0.8117x10^{-7}$	$0.5986x10^{-7}$	$0.4001x10^{-7}$	$0.5845x10^{-7}$
360	$1.1481x10^{-7}$	$1.0003x10^{-7}$	$0.7610x10^{-7}$	$0.9540x10^{-7}$
Average of 36 sectors	$1.0223x10^{-7}$	$1.1150x10^{-7}$	$0.9776x10^{-7}$	$1.0414x10^{-7}$

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	1	0	0	1
4	0	1	0	1	2
5	0	1	0	2	3
6	0	3	0	1	4
7	0	2	0	1	3
8	0	2	0	1	3
9	0	3	0	3	6
10	0	3	0	0	3
11	0	4	0	1	5
12	0	0	0	0	0
13	0	4	0	0	4
14	0	0	0	2	2
15	0	4	0	0	4
16	0	0	0	0	0
17	0	0	0	1	1
18	0	0	0	0	0
OVER 18	0	2	0	1	3
TOTAL	0	30	0	14	44

Table 2D-2.1

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	3	3
4	0	1	0	1	2
5	0	3	0	3	6
6	0	5	0	6	11
7	0	5	0	2	7
8	0	2	0	3	5
9	0	3	0	4	7
10	0	4	0	8	12
11	0	2	0	6	8
12	0	2	0	1	3
13	0	5	0	1	6
14	0	5	0	0	5
15	0	0	0	0	0
16	0	1	0	1	2
17	0	4	0	0	4
18	0	1	0	0	1
OVER 18	0	2	0	0	2
TOTAL	0	45	0	39	84

Table 2D-2.2

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	2	2
2	0	0	0	0	0
3	0	0	0	2	2
4	1	0	0	3	4
5	0	6	0	5	11
6	0	3	0	2	5
7	0	3	0	7	10
8	0	6	0	3	9
9	0	6	0	6	12
10	0	5	0	8	13
11	0	1	0	4	5
12	0	2	0	2	4
13	0	1	0	1	2
14	0	6	0	1	7
15	0	2	0	0	2
16	0	2	0	1	3
17	0	1	0	0	1
18	0	1	0	0	1
OVER 18	0	2	0	1	3
TOTAL	1	47	0	48	96

Table 2D-2.3

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	3	3
4	0	1	0	2	3
5	0	2	0	4	6
6	0	4	0	3	7
7	0	4	0	6	10
8	0	11	0	7	18
9	0	6	0	3	9
10	0	6	1	3	10
11	0	4	0	4	8
12	0	7	2	2	11
13	0	2	1	0	3
14	0	7	0	0	7
15	0	4	0	0	4
16	0	5	0	1	6
17	0	3	0	0	3
18	0	3	0	0	3
OVER 18	0	3	0	0	3
TOTAL	0	72	4	39	115

Table 2D-2.4

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 50

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	2	2
3	0	1	0	3	4
4	0	0	0	4	4
5	0	4	0	6	10
6	0	3	0	3	6
7	0	6	0	4	10
8	0	7	1	3	11
9	0	8	0	5	13
10	0	11	0	4	15
11	0	5	0	0	5
12	0	10	0	3	13
13	0	12	1	5	18
14	0	5	2	3	10
15	0	8	1	1	10
16	0	6	0	2	8
17	0	4	1	1	6
18	0	7	0	0	7
OVER 18	0	2	0	0	2
TOTAL	0	99	6	49	154

Table 2D-2.5

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	1	1
2	0	0	0	0	0
3	1	0	0	5	6
4	0	0	0	0	0
5	1	3	0	2	6
6	0	7	0	9	16
7	0	17	0	8	25
8	0	11	0	4	15
9	0	24	0	4	28
10	0	26	0	4	30
11	0	23	0	9	32
12	0	25	0	1	26
13	0	21	0	0	21
14	0	23	0	0	23
15	0	19	0	3	22
16	0	9	2	0	11
17	0	10	0	1	11
18	0	6	0	0	6
OVER 18	0	10	0	0	10
TOTAL	2	234	2	52	290

Table 2D-2.6

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	1	0	0	1
2	0	0	0	1	1
3	0	0	0	3	3
4	0	3	0	4	7
5	0	4	0	3	7
6	0	10	0	8	18
7	0	22	0	5	27
8	0	23	0	6	29
9	0	30	0	15	45
10	0	36	0	8	44
11	0	30	0	9	39
12	0	18	0	9	27
13	0	24	0	9	33
14	0	15	0	1	16
15	0	13	1	1	15
16	0	8	1	0	9
17	0	4	0	1	5
18	0	9	1	0	10
OVER 18	0	13	0	0	13
TOTAL	0	263	3	83	349

Table 2D-2.7

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 80

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	5	5
4	0	2	0	6	8
5	0	5	0	3	8
6	0	19	0	9	28
7	0	21	0	9	30
8	0	38	0	16	54
9	0	34	0	7	41
10	0	23	0	12	35
11	0	34	0	11	45
12	0	27	3	12	42
13	0	33	3	5	41
14	0	16	3	0	19
15	0	18	1	2	21
16	0	17	2	1	20
17	0	7	1	2	10
18	0	14	0	0	14
OVER 18	0	24	5	0	29
TOTAL	0	332	18	101	451

Table 2D-2.8

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	3	3
3	0	0	0	4	4
4	0	2	0	3	5
5	0	11	0	5	16
6	0	13	0	8	21
7	0	22	0	8	30
8	0	39	0	7	46
9	0	18	1	10	29
10	0	30	0	8	38
11	0	30	0	9	39
12	0	19	0	4	23
13	0	11	1	2	14
14	0	8	0	1	9
15	0	12	2	4	18
16	0	13	3	5	21
17	0	5	0	4	9
18	0	14	0	3	17
OVER 18	0	24	2	0	26
TOTAL	0	271	9	89	369

Table 2D-2.9

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	1	1
4	0	3	0	1	4
5	0	3	0	3	6
6	0	19	0	6	25
7	0	24	0	5	29
8	0	31	0	4	35
9	0	24	0	11	35
10	0	20	0	7	27
11	0	25	0	3	28
12	0	13	1	3	17
13	0	14	0	4	18
14	0	14	0	0	14
15	0	6	0	3	9
16	0	11	0	1	12
17	0	4	0	2	6
18	0	5	1	2	8
OVER 18	0	9	3	0	12
TOTAL	0	225	5	59	289

Table 2D-2.10

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	3	3
3	0	0	0	0	0
4	0	1	0	2	3
5	0	3	0	4	7
6	0	8	0	8	16
7	1	14	0	9	24
8	0	29	0	8	37
9	0	42	0	9	51
10	0	25	0	13	38
11	0	28	2	12	42
12	1	25	1	2	29
13	0	18	1	3	22
14	0	13	1	1	15
15	0	10	1	3	14
16	0	11	0	1	12
17	0	8	0	0	8
18	0	3	0	0	3
OVER 18	0	0	0	0	0
TOTAL	2	238	6	79	325

Table 2D-2.11

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	2	3
4	0	4	0	2	6
5	0	3	0	1	4
6	0	7	0	11	18
7	0	21	0	11	32
8	0	24	0	9	33
9	0	21	0	4	25
10	0	38	0	3	41
11	0	24	0	3	27
12	0	18	2	5	25
13	0	26	1	1	28
14	0	8	1	0	9
15	0	9	0	0	8
16	0	4	0	0	4
17	0	0	0	0	0
18	0	3	0	0	3
OVER 18	0	0	1	0	1
TOTAL	0	210	5	53	268

Table 2D-2.12

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	2	2
3	0	1	0	2	3
4	0	3	0	0	3
5	0	5	0	3	8
6	0	10	0	4	14
7	0	16	0	2	18
8	1	21	0	6	28
9	0	26	0	4	30
10	0	33	0	1	34
11	0	26	0	1	27
12	0	23	0	0	23
13	0	17	1	0	18
14	0	5	1	0	6
15	0	2	1	0	3
16	0	5	1	0	6
17	0	1	0	0	1
18	0	0	1	0	1
OVER 18	0	0	6	0	6
TOTAL	1	194	11	26	232

Table 2D-2.13

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	3	3
1	0	0	0	0	0
2	0	1	0	2	3
3	0	1	0	2	3
4	0	6	0	0	6
5	0	5	0	2	7
6	0	10	0	1	11
7	0	14	0	3	17
8	0	14	0	6	20
9	0	22	0	3	25
10	0	11	0	1	12
11	0	16	1	1	18
12	0	16	5	0	21
13	0	7	3	0	10
14	0	6	0	0	6
15	0	4	2	0	6
16	0	2	1	0	3
17	0	1	0	0	1
18	0	0	0	0	0
OVER 18	0	0	3	0	3
TOTAL	0	136	15	24	175

Table 2D-2.14

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	3	3
1	0	0	0	0	0
2	0	0	0	1	1
3	0	2	0	4	6
4	0	3	0	1	4
5	0	2	0	3	5
6	0	12	0	1	13
7	0	1	0	2	3
8	0	8	0	3	11
9	0	9	0	5	14
10	0	15	0	1	16
11	0	17	0	0	17
12	0	14	0	0	14
13	0	9	0	0	9
14	0	6	1	0	7
15	0	4	2	0	6
16	0	0	2	0	2
17	0	0	0	0	0
18	0	2	0	0	2
OVER 18	0	4	2	0	6
TOTAL	0	108	7	24	139

Table 2D-2.15

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	1	0	0	1
2	0	0	0	0	0
3	0	2	0	1	3
4	0	2	0	1	3
5	0	4	0	6	10
6	0	3	0	4	7
7	0	4	0	2	6
8	0	7	0	2	9
9	0	9	0	1	10
10	0	22	0	0	22
11	0	13	0	0	13
12	0	21	0	1	22
13	0	8	1	0	9
14	0	3	2	0	5
15	0	2	2	0	4
16	0	0	0	0	0
17	0	0	0	0	0
18	0	3	0	0	3
OVER 18	0	6	0	0	6
TOTAL	0	110	5	19	134

Table 2D-2.16

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	1	1
4	0	3	0	4	7
5	0	2	0	9	11
6	0	6	0	7	13
7	0	3	0	14	17
8	0	8	0	4	12
9	0	6	0	0	6
10	0	22	0	0	22
11	0	13	0	1	14
12	0	12	0	0	12
13	0	7	1	0	8
14	0	5	2	0	7
15	0	3	1	0	4
16	0	9	0	0	9
17	0	3	0	0	3
18	0	4	1	0	5
OVER 18	0	1	6	0	7
TOTAL	0	107	11	40	158

Table 2D-2.17

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	1	0	0	1
2	0	0	0	1	1
3	0	1	0	5	6
4	0	1	0	8	9
5	0	3	0	9	12
6	0	8	0	13	21
7	0	4	1	8	13
8	0	4	0	3	7
9	0	9	0	2	11
10	0	10	0	0	10
11	0	9	3	1	13
12	0	6	1	0	7
13	0	7	1	0	8
14	0	4	0	0	4
15	0	6	0	0	6
16	0	1	0	0	1
17	0	3	1	0	4
18	0	2	1	0	3
OVER 18	0	2	2	0	4
TOTAL	0	81	10	50	141

Table 2D-2.18

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	1	0	2	3
2	0	1	0	3	4
3	0	0	0	4	4
4	0	5	0	10	15
5	0	3	0	9	12
6	0	7	0	9	16
7	0	4	1	6	11
8	0	14	0	6	20
9	0	3	0	6	9
10	0	8	2	2	12
11	0	7	0	0	7
12	0	11	1	0	12
13	0	15	1	0	16
14	0	7	1	0	8
15	0	6	0	0	6
16	0	7	0	1	8
17	0	2	0	0	2
18	0	2	0	0	2
OVER 18	0	3	8	0	11
TOTAL	0	106	14	58	178

Table 2D-2.19

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	1	1
1	0	1	0	4	5
2	0	1	0	3	4
3	0	0	0	4	4
4	0	0	0	6	6
5	0	3	1	1	5
6	0	11	0	11	22
7	0	4	0	11	15
8	0	5	0	6	11
9	0	6	0	7	13
10	0	7	0	2	9
11	0	6	0	0	6
12	0	4	0	0	4
13	0	10	0	0	10
14	0	4	0	1	5
15	0	6	0	0	6
16	0	2	0	0	2
17	0	0	0	0	0
18	0	1	0	0	1
OVER 18	0	4	9	0	13
TOTAL	0	75	10	57	142

Table 2D-2.20

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	0	0
2	0	0	0	2	2
3	0	2	0	1	3
4	0	2	0	5	7
5	0	4	0	4	8
6	0	5	0	6	11
7	0	4	0	1	5
8	0	2	0	3	5
9	0	6	1	2	9
10	0	6	0	2	8
11	0	1	1	1	3
12	0	7	1	0	8
13	0	6	1	0	7
14	0	3	1	0	4
15	0	5	0	0	5
16	0	3	1	0	4
17	0	2	1	0	3
18	0	2	3	0	5
OVER 18	0	4	3	0	7
TOTAL	0	64	13	29	106

Table 2D-2.21

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	5	5
4	0	4	0	12	16
5	0	1	0	1	2
6	0	2	0	7	9
7	0	6	1	3	10
8	0	3	0	3	6
9	0	4	0	2	6
10	0	3	2	0	5
11	0	3	1	0	4
12	0	1	0	0	1
13	0	4	0	0	4
14	0	4	0	0	4
15	0	2	1	0	3
16	0	1	1	0	2
17	0	0	1	0	1
18	0	1	2	0	3
OVER 18	0	3	9	0	12
TOTAL	0	42	18	33	93

Table 2D-2.22

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
	--------STABILITY CLASSIFICATION-------				
0	0	0	0	0	0
1	0	0	0	2	2
2	0	1	0	3	4
3	0	0	0	4	4
4	1	0	0	9	10
5	0	2	0	7	9
6	0	2	0	6	8
7	0	4	0	2	6
8	0	5	0	4	9
9	0	4	0	0	4
10	0	6	0	0	6
11	0	2	0	0	2
12	0	0	0	0	0
13	0	2	0	0	2
14	0	2	0	0	2
15	0	0	0	0	0
16	0	1	0	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	1	31	0	37	69

Table 2D-2.23

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
	--------STABILITY CLASSIFICATION-------				
0	0	0	0	0	0
1	0	0	0	0	0
2	1	1	0	3	5
3	0	2	0	2	4
4	0	3	0	3	6
5	0	2	0	4	6
6	1	1	0	13	15
7	0	5	0	6	11
8	0	6	1	2	9
9	0	5	0	1	6
10	0	3	1	1	5
11	0	2	0	0	2
12	0	3	0	0	3
13	0	0	0	0	0
14	0	0	0	0	0
15	0	1	0	0	1
16	0	1	0	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	2	35	2	35	74

Table 2D-2.24

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	2	2
3	0	1	0	2	3
4	0	1	0	1	2
5	1	4	0	2	7
6	0	0	0	3	3
7	1	6	0	4	11
8	0	4	0	8	12
9	0	3	0	2	5
10	0	4	0	0	4
11	0	4	0	0	4
12	0	1	0	0	1
13	0	0	0	0	0
14	0	0	1	0	1
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	2	28	1	24	55

Table 2D-2.25

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	3	3
2	0	0	0	3	3
3	0	1	0	1	2
4	0	3	0	2	5
5	0	4	0	2	6
6	1	3	0	3	7
7	1	4	0	1	6
8	0	5	0	0	5
9	0	0	0	0	0
10	0	2	0	0	2
11	0	1	0	0	1
12	0	3	0	0	3
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	1	0	0	1
17	0	0	0	0	0
18	0	1	0	0	1
OVER 18	0	1	0	0	1
TOTAL	2	29	0	15	46

Table 2D-2.26

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	2	2
2	0	0	0	2	2
3	0	0	0	4	4
4	0	1	0	1	2
5	0	2	0	6	8
6	0	7	0	1	8
7	0	2	0	4	6
8	0	4	1	1	6
9	0	3	4	1	8
10	0	3	0	0	3
11	0	1	2	0	3
12	0	0	3	0	3
13	0	1	0	0	1
14	0	2	0	0	2
15	0	2	0	0	2
16	0	1	0	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	0	29	10	22	61

Table 2D-2.27

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	2	2
2	0	0	0	2	2
3	0	2	0	4	6
4	0	4	0	3	7
5	1	3	1	5	10
6	2	1	1	4	8
7	0	4	1	1	6
8	0	5	0	2	7
9	0	7	1	1	9
10	1	4	0	0	5
11	0	6	1	0	7
12	0	7	1	0	8
13	2	5	1	0	8
14	0	4	1	0	5
15	0	0	0	0	0
16	0	4	0	0	4
17	0	3	0	0	3
18	0	5	0	0	5
OVER 18	0	3	0	0	3
TOTAL	6	67	8	24	105

Table 2D-2.28

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	3	3
2	0	0	0	2	2
3	0	2	0	1	3
4	0	4	0	2	6
5	0	2	0	2	4
6	0	10	1	5	16
7	1	5	2	6	14
8	3	7	1	5	16
9	2	8	3	0	13
10	1	8	0	1	10
11	1	5	1	0	7
12	0	0	0	0	0
13	1	7	0	0	8
14	2	5	0	0	7
15	0	1	0	0	1
16	0	2	0	0	2
17	0	2	0	0	2
18	0	6	0	0	6
OVER 18	0	3	0	0	3
TOTAL	11	77	8	28	124

Table 2D-2.29

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	3	3
2	0	0	0	5	5
3	0	0	0	6	6
4	0	1	0	7	8
5	0	6	1	9	16
6	1	8	0	10	19
7	0	6	1	3	10
8	0	5	3	3	11
9	0	5	2	2	9
10	1	9	0	0	10
11	0	4	1	0	5
12	0	4	0	0	4
13	0	2	3	0	5
14	0	2	0	0	2
15	0	1	0	0	1
16	0	0	0	0	0
17	0	3	0	0	3
18	0	1	0	0	1
OVER 18	0	3	1	0	4
TOTAL	2	60	12	49	123

Table 2D-2.30

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	1	1
2	0	0	0	2	2
3	0	0	0	5	5
4	0	3	0	2	5
5	1	7	1	3	12
6	1	5	4	3	13
7	0	5	1	5	11
8	0	6	2	9	17
9	0	6	2	6	14
10	1	4	1	0	6
11	0	6	0	0	6
12	1	3	1	1	6
13	0	2	0	0	2
14	0	2	0	0	2
15	0	2	0	0	2
16	0	3	0	0	3
17	0	1	0	0	1
18	0	5	0	0	5
OVER 18	0	4	2	0	6
TOTAL	4	64	14	38	120

Table 2D-2.31

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	2	2
3	0	0	0	1	1
4	1	0	0	2	3
5	1	1	0	5	7
6	0	2	0	6	8
7	1	10	0	15	26
8	1	4	0	8	13
9	0	9	0	16	25
10	0	11	0	5	16
11	0	8	0	8	16
12	0	7	0	4	11
13	0	2	1	3	6
14	0	3	1	1	5
15	0	5	0	0	5
16	0	2	1	1	4
17	0	9	0	0	9
18	0	7	0	0	7
OVER 18	0	3	1	0	4
TOTAL	4	83	4	77	168

Table 2D-2.32

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	4	4
1	0	1	0	2	3
2	0	0	0	0	0
3	0	0	0	3	3
4	1	2	0	4	7
5	1	2	0	4	7
6	0	7	0	11	18
7	0	2	0	12	14
8	1	6	0	12	19
9	1	7	0	6	14
10	0	15	1	14	30
11	0	24	1	11	36
12	0	19	2	5	26
13	0	17	2	2	21
14	0	5	1	0	6
15	0	6	0	0	6
16	0	7	0	1	8
17	0	5	0	0	5
18	0	8	0	0	8
OVER 18	0	6	0	0	6
TOTAL	4	139	7	91	241

Table 2D-2.33

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	3	3
4	0	1	0	6	7
5	0	4	0	11	15
6	0	5	0	10	15
7	0	8	0	7	15
8	0	11	0	14	25
9	0	14	0	11	25
10	0	14	0	10	24
11	0	9	0	6	15
12	0	14	1	2	17
13	0	10	7	3	20
14	0	9	0	0	9
15	0	5	0	0	5
16	0	3	0	1	4
17	0	6	0	0	6
18	0	0	0	0	0
OVER 18	0	1	0	0	1
TOTAL	0	114	8	96	208

Table 2D-2.34

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	1	0	0	1
3	0	0	0	0	0
4	0	0	0	7	7
5	0	2	0	4	6
6	0	11	0	7	18
7	0	4	0	4	8
8	0	6	0	2	8
9	0	10	0	1	11
10	0	13	0	3	16
11	0	6	0	2	8
12	0	17	1	0	18
13	0	8	4	0	12
14	0	8	1	1	10
15	0	9	1	0	10
16	0	8	0	0	8
17	0	3	0	0	3
18	0	2	0	1	3
OVER 18	0	1	0	0	1
TOTAL	0	109	7	32	148

Table 2D-2.35

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	1	1
2	0	0	0	0	0
3	0	0	0	5	5
4	0	0	0	2	2
5	0	3	0	4	7
6	1	4	0	4	9
7	0	5	0	2	7
8	0	2	0	1	3
9	0	8	0	0	8
10	0	10	0	5	15
11	0	5	0	3	8
12	0	10	0	3	13
13	0	7	1	1	9
14	0	7	1	0	8
15	0	5	0	0	5
16	0	1	0	0	1
17	0	2	0	0	2
18	0	1	0	0	1
OVER 18	0	0	0	0	0
TOTAL	1	70	2	32	105

Table 2D-2.36

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	22	22
1	0	6	0	31	37
2	1	6	0	54	61
3	1	20	0	101	122
4	4	70	0	127	201
5	6	124	4	156	290
6	7	241	6	223	477
7	5	291	8	199	503
8	6	385	9	184	584
9	3	408	14	160	585
10	4	470	8	126	608
11	1	404	14	106	525
12	2	369	26	60	457
13	3	324	36	40	403
14	2	216	21	12	251
15	0	181	16	17	214
16	0	151	15	17	183
17	0	96	5	12	113
18	0	119	10	6	135
OVER 18	0	143	63	2	208
TOTAL	45	4024	255	1655	5979

Table 2D-2.37

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	1
4	0	1	1	0	0	0	0	2
5	0	1	1	0	1	0	0	3
6	0	2	1	1	0	0	0	4
7	0	2	1	0	0	0	0	3
8	0	2	0	1	0	0	0	3
9	0	3	2	1	0	0	0	6
10	0	2	1	0	0	0	0	3
11	0	4	0	0	1	0	0	5
12	0	0	0	0	0	0	0	0
13	0	2	2	0	0	0	0	4
14	0	0	0	2	0	0	0	2
15	0	2	1	1	0	0	0	4
16	0	0	0	0	0	0	0	0
17	0	0	0	1	0	0	0	1
18 & OVER	0	0	3	0	0	0	0	3
TOTAL	0	21	14	7	2	0	0	44

Table 2D-3.1

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	2	0	0	1	0	3
4	0	1	0	1	0	0	0	2
5	0	2	2	1	1	0	0	6
6	0	5	2	3	1	0	0	11
7	0	1	3	2	1	0	0	7
8	0	1	1	3	0	0	0	5
9	0	1	3	3	0	0	0	7
10	0	5	0	4	3	0	0	12
11	0	2	1	3	1	1	0	8
12	0	2	0	0	1	0	0	3
13	0	4	1	1	0	0	0	6
14	0	3	2	0	0	0	0	5
15	0	0	0	0	0	0	0	0
16	0	0	1	0	0	0	0	1
17	0	2	2	0	0	0	0	4
18 & OVER	0	1	2	0	0	0	0	3
TOTAL	0	30	22	21	3	2	0	83

Table 2D-3.2

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	1	0	2
2	0	0	0	0	0	0	0	0
3	0	1	0	1	0	0	0	2
4	0	1	1	2	0	0	0	4
5	0	5	2	3	1	0	0	11
6	0	2	2	1	0	0	0	5
7	0	3	1	6	0	0	0	10
8	0	3	4	2	0	0	0	9
9	0	5	2	4	1	0	0	12
10	0	5	2	4	2	0	0	13
11	0	0	0	3	2	0	0	5
12	0	2	0	2	0	0	0	4
13	0	0	1	1	0	0	0	2
14	0	2	4	1	0	0	0	7
15	0	1	1	0	0	0	0	2
16	0	1	0	1	0	0	0	2
17	0	1	0	0	0	0	0	1
18 & OVER	0	1	3	0	0	0	0	4
TOTAL	0	33	24	31	6	1	0	95

Table 2D-3.3

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	1	0	0	1
3	0	1	0	0	2	0	0	3
4	0	0	1	0	2	0	0	3
5	0	1	2	2	1	0	0	6
6	0	2	2	2	1	0	0	7
7	0	2	3	5	0	0	0	10
8	0	4	7	7	0	0	0	18
9	0	4	2	3	0	0	0	9
10	0	0	6	2	1	1	0	10
11	0	2	0	6	0	0	0	8
12	0	3	4	4	0	0	0	11
13	0	0	3	0	0	0	0	3
14	0	4	1	2	0	0	0	7
15	0	0	2	2	0	0	0	4
16	0	1	2	1	0	0	0	4
17	0	0	2	1	0	0	0	3
18 & OVER	0	3	2	1	0	0	0	6
TOTAL	0	27	39	38	8	1	0	113

Table 2D-3.4

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	1	0	2
3	0	1	0	2	1	0	0	4
4	0	1	0	1	2	0	0	4
5	0	3	1	5	1	0	0	10
6	0	0	3	3	0	0	0	6
7	0	1	3	5	1	0	0	10
8	0	4	2	5	0	0	0	11
9	0	4	3	5	1	0	0	13
10	0	3	7	5	0	0	0	15
11	0	2	1	2	0	0	0	5
12	0	4	4	5	0	0	0	13
13	0	3	5	10	0	0	0	18
14	0	0	2	7	1	0	0	10
15	0	2	5	2	1	0	0	10
16	0	1	1	3	2	0	0	7
17	0	2	1	3	0	0	0	6
18 & OVER	0	7	2	0	0	0	0	9
TOTAL	0	38	41	63	10	1	0	153

Table 2D-3.5

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	1	0	1
2	0	0	0	0	0	0	0	0
3	0	0	1	4	1	0	0	6
4	0	0	0	0	0	0	0	0
5	0	2	1	3	0	0	0	6
6	0	4	2	8	1	0	0	15
7	0	5	7	12	1	0	0	25
8	0	2	3	9	1	0	0	15
9	0	9	6	12	1	0	0	28
10	0	12	9	7	2	0	0	30
11	1	5	10	13	3	0	0	32
12	0	10	9	6	1	0	0	26
13	0	8	7	5	1	0	0	21
14	0	9	7	8	0	0	0	24
15	0	6	12	4	0	0	0	22
16	0	5	2	4	1	0	0	12
17	0	4	6	2	0	0	0	12
18 & OVER	0	5	10	1	0	0	0	16
TOTAL	1	86	92	99	13	1	0	292

Table 2D-3.6

TURKEY POINT DATA

YEAR: 1968   30 FT. WIND SPEED VS. TEMPERATURE GRADIENT   SNE CODE 2

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	1
2	0	0	0	1	0	0	0	1
3	0	0	0	3	0	0	0	3
4	0	3	0	3	1	0	0	7
5	0	2	2	1	1	1	0	7
6	0	5	4	6	2	0	0	17
7	0	8	5	13	1	0	0	27
8	0	11	5	12	0	1	0	29
9	0	16	8	18	2	0	0	44
10	0	13	12	16	3	0	0	44
11	0	9	12	14	4	0	0	39
12	0	7	6	12	2	0	0	27
13	0	9	11	12	1	0	0	33
14	0	6	3	8	0	0	0	17
15	0	1	10	4	0	0	0	15
16	0	1	3	6	0	0	0	10
17	0	0	2	4	0	0	0	6
18 & OVER	0	2	11	10	0	0	0	23
TOTAL	0	93	94	144	17	2	0	350

Table 2D-3.7

TURKEY POINT DATA

YEAR: 1968   30 FT. WIND SPEED VS. TEMPERATURE GRADIENT   SNE CODE 2

WIND FROM SECTOR: 80

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	0	1	4	0	0	0	5
4	0	0	4	3	1	0	0	8
5	0	1	4	2	1	0	0	8
6	0	4	10	12	0	2	0	28
7	0	8	10	10	3	0	0	31
8	0	22	9	19	4	0	0	54
9	0	12	16	9	3	0	0	40
10	0	13	10	7	5	0	0	35
11	0	10	14	18	3	0	0	45
12	0	8	15	19	2	0	0	43
13	0	8	15	16	2	0	0	41
14	0	2	7	11	0	0	0	20
15	0	5	8	8	0	0	0	21
16	0	0	9	10	0	0	0	19
17	0	3	3	4	0	0	0	10
18 & OVER	0	6	24	13	0	0	0	43
TOTAL	0	102	159	165	24	2	0	452

Table 2D-3.8

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0	1
2	0	0	0	2	1	0	0	3
3	0	0	1	3	0	0	0	4
4	0	0	2	3	0	0	0	5
5	0	4	5	5	1	0	0	15
6	0	3	10	4	3	1	0	21
7	0	6	11	10	2	0	0	29
8	0	19	15	10	2	0	0	46
9	0	7	8	10	5	0	0	30
10	0	10	16	10	2	0	0	38
11	0	8	17	14	0	0	0	39
12	0	5	11	6	1	0	0	23
13	0	4	6	4	0	0	0	14
14	0	2	5	2	0	0	0	9
15	0	2	4	12	0	0	0	18
16	0	3	6	11	0	0	0	20
17	0	1	4	3	1	0	0	9
18 & OVER	0	3	21	19	0	0	0	43
TOTAL	0	77	143	128	18	1	0	367

Table 2D-3.9

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	1
3	0	0	0	0	1	0	0	1
4	0	1	2	1	0	0	0	4
5	0	1	3	2	0	0	0	6
6	0	6	10	8	1	0	0	25
7	0	8	8	12	1	0	0	29
8	0	9	16	8	2	0	0	35
9	0	10	9	9	7	0	0	35
10	0	3	12	9	2	1	0	27
11	0	12	13	3	0	0	0	28
12	0	2	9	6	0	0	0	17
13	0	6	7	5	0	0	0	18
14	0	3	11	0	0	0	0	14
15	0	4	3	2	0	0	0	9
16	0	5	5	0	0	0	0	10
17	0	3	2	1	0	0	0	6
18 & OVER	0	6	7	7	0	0	0	20
TOTAL	0	79	118	75	14	1	0	287

Table 2D-3.10

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0	1
2	0	0	1	1	0	1	0	3
3	0	0	0	0	0	0	0	0
4	0	0	2	1	0	0	0	3
5	0	1	0	5	1	0	0	7
6	0	1	6	7	2	0	0	16
7	0	3	8	10	3	0	0	24
8	0	10	16	7	4	0	0	37
9	0	18	19	11	4	0	0	52
10	0	12	9	12	5	0	0	38
11	0	6	13	19	4	0	0	42
12	0	10	10	9	0	0	0	29
13	0	5	8	9	0	0	0	22
14	0	3	5	7	0	0	0	15
15	0	2	3	9	0	0	0	14
16	0	2	6	1	0	0	0	9
17	0	3	5	0	0	0	0	8
18 & OVER	0	0	3	0	0	0	0	3
TOTAL	0	76	115	108	23	1	0	323

Table 2D-3.11

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	1	1
3	0	0	1	1	1	0	0	3
4	0	1	1	4	0	0	0	6
5	0	3	0	0	1	0	0	4
6	0	2	5	9	2	0	0	18
7	0	12	7	12	1	0	0	32
8	0	9	8	12	3	0	0	32
9	0	9	7	8	1	0	0	25
10	0	26	10	3	1	0	0	40
11	0	15	7	4	1	0	0	27
12	0	5	13	4	3	0	0	25
13	0	4	19	5	0	0	0	28
14	0	3	4	2	0	0	0	9
15	0	0	5	3	0	0	0	8
16	0	0	2	0	0	0	0	2
17	0	0	0	0	0	0	0	0
18 & OVER	0	1	3	0	0	0	0	4
TOTAL	0	90	92	67	14	0	1	264

Table 2D-3.12

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	1
2	0	0	0	2	0	0	0	2
3	0	0	2	1	0	0	0	3
4	0	0	3	0	0	0	0	3
5	0	1	2	4	1	0	0	8
6	0	1	6	6	0	0	0	13
7	0	6	6	5	1	0	0	18
8	0	13	11	5	0	0	0	29
9	0	11	14	4	1	0	0	30
10	0	17	9	7	0	0	0	33
11	0	13	8	4	1	0	0	26
12	0	13	7	3	0	0	0	23
13	0	9	5	4	0	0	0	18
14	0	4	1	1	0	0	0	6
15	0	1	1	1	0	0	0	3
16	0	2	3	1	0	0	0	6
17	0	0	1	0	0	0	0	1
18 & OVER	0	1	1	5	0	0	0	7
TOTAL	0	92	80	54	4	0	0	230

Table 2D-3.13

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	2	1	0	3
1	0	0	0	0	0	0	0	0
2	0	1	1	1	0	0	0	3
3	0	1	1	1	0	0	0	3
4	0	1	4	1	0	0	0	6
5	0	1	4	2	0	0	0	7
6	0	1	7	3	0	0	0	11
7	0	6	6	3	2	0	0	17
8	0	4	7	6	3	0	0	20
9	0	8	12	5	0	0	0	25
10	0	2	7	3	0	0	0	12
11	0	5	9	4	0	0	0	18
12	0	8	9	4	0	0	0	21
13	0	4	2	4	0	0	0	10
14	0	3	2	1	0	0	0	6
15	0	2	2	2	0	0	0	6
16	0	0	2	1	0	0	0	3
17	0	0	1	0	0	0	0	1
18 & OVER	0	0	0	3	0	0	0	3
TOTAL	0	47	76	44	7	1	0	175

Table 2D-3.14

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	1	0	3
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	1	0	1
3	0	0	1	3	2	0	0	6
4	0	0	2	2	0	0	0	4
5	0	0	0	3	2	0	0	5
6	0	1	7	5	0	0	0	13
7	0	0	1	1	1	0	0	3
8	0	2	6	2	1	0	0	11
9	0	4	2	8	0	0	0	14
10	0	3	9	3	0	0	0	15
11	0	10	4	3	0	0	0	17
12	0	7	6	1	0	0	0	14
13	0	3	3	3	0	0	0	9
14	0	3	2	2	0	0	0	7
15	0	3	1	2	0	0	0	6
16	0	0	1	1	0	0	0	2
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	6	2	0	0	0	8
TOTAL	0	36	51	43	6	2	0	138

Table 2D-3.15

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	1	0	0	0	0	1
2	0	0	0	0	0	0	0	0
3	0	1	2	0	0	0	0	3
4	0	0	2	1	0	0	0	3
5	0	0	4	2	3	1	0	10
6	0	0	3	2	2	0	0	7
7	0	0	3	1	1	0	0	5
8	0	2	2	4	1	0	0	9
9	0	2	5	3	0	0	0	10
10	0	2	12	8	0	0	0	22
11	0	8	3	2	0	0	0	13
12	0	14	5	3	0	0	0	22
13	0	6	1	2	0	0	0	9
14	0	3	0	2	0	0	0	5
15	0	2	0	2	0	0	0	4
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	7	2	0	0	0	0	9
TOTAL	0	47	45	33	7	1	0	133

Table 2D-3.16

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	1	0	0	0	1
4	0	0	1	6	0	0	0	7
5	0	0	2	6	3	0	0	11
6	0	0	1	10	2	0	0	13
7	0	0	1	11	2	0	0	14
8	0	1	2	9	0	0	0	12
9	0	2	0	4	0	0	0	6
10	0	8	4	5	0	0	0	17
11	0	4	4	6	0	0	0	14
12	0	6	4	2	0	0	0	12
13	0	6	1	1	0	0	0	8
14	0	5	0	2	0	0	0	7
15	0	2	1	1	0	0	0	4
16	0	8	1	0	0	0	0	9
17	0	2	1	0	0	0	0	3
18 & OVER	0	4	4	4	0	0	0	12
TOTAL	0	48	27	68	7	0	0	150

Table 2D-3.17

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	1
2	0	0	0	0	1	0	0	1
3	0	0	0	5	1	0	0	6
4	0	0	1	7	1	0	0	9
5	0	1	1	8	2	0	0	12
6	0	0	6	10	3	0	0	19
7	0	0	2	9	1	0	0	12
8	0	2	1	2	1	1	0	7
9	0	0	5	5	1	0	0	11
10	0	3	3	2	0	0	0	8
11	0	2	4	6	1	0	0	13
12	0	2	3	3	0	0	0	8
13	0	2	5	1	0	0	0	8
14	0	1	3	0	0	0	0	4
15	0	5	1	0	0	0	0	6
16	0	1	0	0	0	0	0	1
17	0	0	3	1	0	0	0	4
18 & OVER	0	4	2	1	0	0	0	7
TOTAL	0	23	40	61	12	1	0	137

Table 2D-3.18

TURKEY POINT DATA

YEAR: 1968   30 FT. WIND SPEED VS. TEMPERATURE GRADIENT   SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	1	2	0	0	0	3
2	0	0	0	3	0	1	0	4
3	0	0	0	4	0	0	0	4
4	0	0	1	12	1	1	0	15
5	0	0	1	7	4	0	0	12
6	0	1	1	10	2	0	0	14
7	0	1	1	7	2	0	0	11
8	0	1	4	10	1	4	0	20
9	0	0	2	2	5	0	0	9
10	0	4	2	3	0	1	0	10
11	0	5	2	0	0	0	0	7
12	0	6	5	1	0	0	0	12
13	0	12	4	0	0	0	0	16
14	0	6	2	0	0	0	0	8
15	0	5	1	0	0	0	0	6
16	0	5	0	1	0	0	0	6
17	0	2	0	0	0	0	0	2
18 & OVER	0	12	1	0	0	0	0	13
TOTAL	0	60	28	62	15	7	0	172

Table 2D-3.19

TURKEY POINT DATA

YEAR: 1968   30 FT. WIND SPEED VS. TEMPERATURE GRADIENT   SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	4	1	0	0	5
2	0	0	1	3	0	0	0	4
3	0	0	1	3	0	0	0	4
4	0	0	0	6	0	0	0	6
5	0	0	2	3	0	0	0	5
6	0	0	3	15	2	2	0	22
7	0	0	1	10	4	0	0	15
8	0	1	1	6	2	0	1	11
9	0	0	5	4	4	0	0	13
10	0	5	0	1	0	2	0	8
11	0	3	2	0	1	0	0	6
12	0	4	0	0	0	0	0	4
13	0	9	1	0	0	0	0	10
14	0	4	0	0	1	0	0	5
15	0	6	0	0	0	0	0	6
16	0	1	1	0	0	0	0	2
17	0	0	0	0	0	0	0	0
18 & OVER	0	5	1	8	0	0	0	14
TOTAL	0	38	19	64	15	4	1	141

Table 2D-3.20

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0	2
3	0	0	1	2	0	0	0	3
4	0	1	0	2	3	0	1	7
5	0	0	3	4	1	0	0	8
6	0	0	2	3	5	1	0	11
7	0	0	1	3	0	1	0	5
8	0	1	1	1	2	0	0	5
9	0	3	2	4	0	0	0	9
10	0	0	6	1	1	0	0	8
11	0	1	0	1	1	0	0	3
12	0	3	4	1	0	0	0	8
13	0	5	1	1	0	0	0	7
14	0	0	1	3	0	0	0	4
15	0	5	0	0	0	0	0	5
16	0	3	1	0	0	0	0	4
17	0	0	3	0	0	0	0	3
18 & OVER	0	4	4	4	0	0	0	12
TOTAL	0	26	31	33	13	2	1	106

Table 2D-3.21

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	5	0	0	0	5
4	0	0	0	9	6	1	0	16
5	0	0	1	0	0	0	0	1
6	0	0	0	8	1	0	0	9
7	0	0	3	6	1	0	0	10
8	0	1	0	3	2	0	0	6
9	0	0	2	2	1	0	1	6
10	0	0	1	2	0	0	0	3
11	0	1	1	1	1	0	0	4
12	0	1	0	0	0	0	0	1
13	0	4	0	0	0	0	0	4
14	0	3	1	0	0	0	0	4
15	0	2	1	0	0	0	0	3
16	0	1	0	1	0	0	0	2
17	0	0	1	0	0	0	0	1
18 & OVER	0	13	2	0	0	0	0	15
TOTAL	0	26	13	37	12	1	1	90

Table 2D-3.22

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	1	1	0	0	2
2	0	0	0	4	0	0	0	4
3	0	0	1	2	1	0	0	4
4	0	0	0	6	2	2	0	10
5	0	0	0	3	5	0	1	9
6	0	0	1	3	3	0	1	8
7	0	0	3	2	0	1	0	6
8	0	0	2	7	0	0	0	9
9	0	1	0	3	0	0	0	4
10	0	1	3	0	0	0	0	4
11	0	0	1	0	0	1	0	2
12	0	0	0	0	0	0	0	0
13	0	1	1	0	0	0	0	2
14	0	0	2	0	0	0	0	2
15	0	0	0	0	0	0	0	0
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	4	14	31	12	4	2	67

Table 2D-3.23

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	3	1	0	0	5
3	0	0	0	3	0	1	0	4
4	0	0	1	4	1	0	0	6
5	0	0	0	2	2	0	1	5
6	0	1	0	3	10	0	1	15
7	0	0	0	5	5	0	1	11
8	0	1	1	6	1	0	0	9
9	0	1	1	3	1	0	0	6
10	0	0	2	2	0	0	0	4
11	0	2	0	0	0	0	0	2
12	0	2	0	1	0	0	0	3
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	1	0	0	0	0	0	1
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	9	6	32	21	1	3	72

Table 2D-3.24

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	1	0	0	2
3	0	0	0	2	0	1	0	3
4	0	0	0	1	1	0	0	2
5	0	0	0	6	1	0	0	7
6	0	0	0	1	2	0	0	3
7	0	1	0	4	4	1	1	11
8	0	1	0	6	3	2	0	12
9	0	0	0	3	1	1	0	5
10	0	2	0	1	0	0	0	3
11	0	1	3	0	0	0	0	4
12	0	0	0	1	0	0	0	1
13	0	0	0	0	0	0	0	0
14	0	1	0	0	0	0	0	1
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	6	3	26	13	5	1	54

Table 2D-3.25

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	2	1	0	0	3
2	0	1	1	0	1	0	0	3
3	0	0	0	2	0	0	0	2
4	0	0	0	5	0	0	0	5
5	0	0	2	3	1	0	0	6
6	0	0	2	4	0	1	0	7
7	0	1	2	1	2	0	0	6
8	0	0	1	4	0	0	0	5
9	0	0	0	0	0	0	0	0
10	0	0	0	2	0	0	0	2
11	0	1	0	0	0	0	0	1
12	0	2	0	1	0	0	0	3
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	1	1	0	0	0	0	2
TOTAL	0	7	9	24	5	1	0	46

Table 2D-3.26

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	2	0	0	0	2
2	0	0	0	2	0	0	0	2
3	0	0	0	3	1	0	0	4
4	0	0	0	1	1	0	0	2
5	0	0	1	3	2	2	0	8
6	0	1	1	4	2	0	0	8
7	0	0	1	4	1	0	0	6
8	0	0	1	3	1	1	0	6
9	0	2	0	5	1	0	0	8
10	0	2	1	0	0	0	0	3
11	0	1	1	1	0	0	0	3
12	0	0	3	0	0	0	0	3
13	0	0	1	0	0	0	0	1
14	0	2	0	0	0	0	0	2
15	0	2	0	0	0	0	0	2
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	11	10	28	9	3	0	61

Table 2D-3.27

TURKEY POINT DATA

YEAR: 1968 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	1	0	0	2
2	0	0	0	0	2	0	0	2
3	0	0	1	3	2	0	0	6
4	0	0	2	3	2	0	0	7
5	0	0	0	7	2	1	0	10
6	0	1	1	3	2	0	1	8
7	0	0	0	5	1	0	0	6
8	0	1	2	2	2	0	0	7
9	0	0	3	4	2	0	0	9
10	0	1	2	2	0	0	0	5
11	0	3	1	2	1	0	0	7
12	0	4	3	1	0	0	0	8
13	0	4	3	1	0	0	0	8
14	0	2	2	1	0	0	0	5
15	0	0	0	0	0	0	0	0
16	0	0	3	1	0	0	0	4
17	0	2	1	0	0	0	0	3
18 & OVER	0	8	0	0	0	0	0	8
TOTAL	0	26	24	36	17	1	1	105

Table 2D-3.28

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	1	1	1	0	3
2	0	0	1	1	0	0	0	2
3	0	0	0	3	0	0	0	3
4	0	0	0	5	1	0	0	6
5	0	0	1	2	0	1	0	4
6	0	0	0	11	4	1	0	16
7	0	0	2	8	3	0	1	14
8	0	2	3	7	4	0	0	16
9	0	2	2	8	1	0	0	13
10	0	3	1	2	3	0	0	9
11	0	3	2	2	0	0	0	7
12	0	0	0	0	0	0	0	0
13	0	4	2	2	0	0	0	8
14	0	4	1	2	0	0	0	7
15	0	1	0	0	0	0	0	1
16	0	1	1	0	0	0	0	2
17	0	0	2	0	0	0	0	2
18 & OVER	0	9	0	0	0	0	0	9
TOTAL	0	29	18	55	17	3	1	123

Table 2D-3.29

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	0	0	0	0	1
1	0	0	0	1	2	0	0	3
2	0	0	0	2	3	0	0	5
3	0	0	0	1	4	1	0	6
4	0	0	0	7	1	0	0	8
5	0	0	3	10	2	1	0	16
6	0	1	5	9	3	0	1	19
7	0	3	2	3	1	1	0	10
8	0	1	2	6	2	0	0	11
9	0	2	1	3	2	1	0	9
10	0	2	1	4	0	0	0	7
11	0	2	1	2	0	0	0	5
12	0	2	2	0	0	0	0	4
13	0	1	4	0	0	0	0	5
14	0	2	0	0	0	0	0	2
15	0	1	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0
17	0	3	0	0	0	0	0	3
18 & OVER	0	5	0	0	0	0	0	5
TOTAL	0	25	22	48	20	4	1	120

Table 2D-3.30

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	1	0	1
2	0	0	1	1	0	0	0	2
3	0	0	0	3	2	0	0	5
4	0	0	1	2	2	0	0	5
5	0	0	2	7	2	1	0	12
6	0	1	2	7	3	0	0	13
7	0	1	0	8	2	0	0	11
8	0	2	3	7	4	1	0	17
9	0	1	2	5	4	0	0	12
10	0	1	1	2	0	0	0	4
11	0	3	2	0	1	0	0	6
12	0	3	1	1	1	0	0	6
13	0	2	0	0	0	0	0	2
14	0	2	0	0	0	0	0	2
15	0	1	1	0	0	0	0	2
16	0	0	2	0	1	0	0	3
17	0	1	0	0	0	0	0	1
18 & OVER	0	9	2	0	0	0	0	11
TOTAL	0	27	20	44	22	3	0	116

Table 2D-3.31

TURKEY POINT DATA

YEAR: 1968 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	1	2
3	0	0	0	0	1	0	0	1
4	0	0	1	1	1	0	0	3
5	0	1	0	1	2	3	0	7
6	0	0	0	2	4	1	1	8
7	0	3	1	10	5	6	1	26
8	0	1	1	7	1	2	1	13
9	0	0	5	11	3	1	2	22
10	0	4	0	8	1	1	1	15
11	0	2	0	9	5	0	0	16
12	0	2	4	4	1	0	0	11
13	0	2	1	2	1	0	0	6
14	0	2	1	2	0	0	0	5
15	0	2	3	0	0	0	0	5
16	0	2	1	0	0	0	0	3
17	0	6	3	0	0	0	0	9
18 & OVER	0	8	3	0	0	0	0	11
TOTAL	0	35	24	58	25	14	7	163

Table 2D-3.32

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	2	1	0	4
1	0	0	0	1	2	0	0	3
2	0	0	0	0	0	0	0	0
3	0	0	0	1	0	2	0	3
4	0	1	2	2	1	0	1	7
5	0	0	3	1	1	1	1	7
6	0	1	0	6	3	6	2	18
7	0	0	0	3	4	6	1	14
8	0	2	0	7	5	4	1	19
9	0	1	2	6	0	2	3	14
10	0	3	2	16	5	1	0	27
11	0	1	8	20	6	1	0	36
12	0	4	7	13	2	0	0	26
13	0	1	7	13	0	0	0	21
14	0	1	3	2	0	0	0	6
15	0	1	4	1	0	0	0	6
16	0	1	5	1	0	0	0	7
17	0	0	4	1	0	0	0	5
18 & OVER	0	7	7	0	0	0	0	14
TOTAL	0	24	54	95	31	24	9	237

Table 2D-3.33

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	1
3	0	0	0	1	0	1	1	3
4	0	0	2	1	3	1	0	7
5	0	0	1	5	3	2	0	11
6	0	0	1	3	3	3	3	13
7	0	3	2	1	2	1	6	15
8	0	5	2	9	6	2	1	25
9	0	1	1	13	7	2	0	24
10	0	4	5	5	6	1	1	22
11	0	4	0	9	1	0	1	15
12	0	4	4	9	0	0	0	17
13	0	4	6	9	1	0	0	20
14	0	4	3	2	0	0	0	9
15	0	4	1	0	0	0	0	5
16	0	0	3	0	0	0	0	3
17	0	5	1	0	0	0	0	6
18 & OVER	0	1	0	0	0	0	0	1
TOTAL	0	39	33	68	32	13	13	198

Table 2D-3.34

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0
4	0	1	0	2	1	3	0	7
5	0	0	2	0	1	2	0	5
6	0	0	3	5	4	2	1	15
7	0	0	1	4	2	0	1	8
8	0	3	3	2	0	0	0	8
9	0	4	3	3	0	0	0	10
10	0	2	4	6	3	0	0	15
11	0	4	1	3	0	0	0	8
12	0	10	4	4	0	0	0	18
13	0	5	2	5	0	0	0	12
14	0	5	3	2	0	0	0	10
15	0	7	2	1	0	0	0	10
16	0	5	3	0	0	0	0	8
17	0	0	2	1	0	0	0	3
18 & OVER	0	1	3	0	0	0	0	4
TOTAL	0	48	36	38	11	7	2	142

Table 2D-3.35

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	1	0	0	0	1
2	0	0	0	0	0	0	0	0
3	0	0	0	2	2	1	0	5
4	0	0	1	1	0	0	0	2
5	0	0	1	3	1	0	2	7
6	0	2	1	5	0	1	0	9
7	0	3	2	2	0	0	0	7
8	0	1	1	1	0	0	0	3
9	0	5	2	1	0	0	0	8
10	0	6	0	7	2	0	0	15
11	0	5	0	3	0	0	0	8
12	0	5	1	6	1	0	0	13
13	0	2	2	4	1	0	0	9
14	0	2	3	3	0	0	0	8
15	0	2	0	3	0	0	0	5
16	0	1	0	0	0	0	0	1
17	0	1	1	0	0	0	0	2
18 & OVER	0	1	0	0	0	0	0	1
TOTAL	0	36	15	43	7	2	2	105

Table 2D-3.36

TURKEY POINT DATA

YEAR: 1968 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	14	4	3	0	22
1	0	0	5	19	9	4	0	37
2	0	3	11	30	11	4	2	61
3	0	5	17	69	22	8	1	122
4	0	13	38	106	34	8	2	201
5	0	30	59	121	51	16	5	282
6	0	48	110	202	73	21	11	465
7	0	87	108	213	61	17	12	498
8	0	144	143	217	58	18	4	584
9	0	148	156	202	59	7	6	578
10	0	179	169	171	47	8	2	576
11	1	159	145	177	38	3	1	524
12	0	160	153	131	15	0	0	459
13	0	139	137	120	7	0	0	403
14	0	96	81	75	2	0	0	254
15	0	80	73	60	1	0	0	214
16	0	54	64	44	4	0	0	166
17	0	41	51	22	1	0	0	115
18 & OVER	0	135	130	78	0	0	0	343
TOTAL	1	1521	1651	2071	497	117	46	5904

Table 2D-3.37

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	1	2
4	0	0	0	2	2
5	0	2	0	5	7
6	0	3	1	1	5
7	0	2	0	0	2
8	0	3	1	0	4
9	0	6	0	1	7
10	0	6	0	2	8
11	0	3	0	1	4
12	0	2	0	1	3
13	0	8	0	0	8
14	0	3	0	0	3
15	0	3	0	0	3
16	0	0	0	0	0
17	0	1	0	0	1
18	0	0	0	0	0
OVER 18	0	6	4	3	13
TOTAL	0	49	6	18	73

Table 2D-4.1

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	4	4
1	0	0	0	0	0
2	0	0	0	0	0
3	0	1	0	3	4
4	0	1	0	1	2
5	0	5	1	5	11
6	0	4	2	4	10
7	0	6	0	2	8
8	0	3	1	5	9
9	0	6	0	0	6
10	0	8	1	1	10
11	0	2	0	1	3
12	0	3	1	1	5
13	0	4	0	0	4
14	0	2	1	0	3
15	0	4	2	2	8
16	0	0	0	0	0
17	0	1	0	0	1
18	0	0	1	0	1
OVER 18	0	9	5	4	18
TOTAL	0	59	15	33	107

Table 2D-4.2

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	3	0	3	6
4	0	1	0	1	2
5	0	6	0	4	10
6	0	7	0	3	10
7	0	12	1	4	17
8	0	6	0	1	7
9	0	4	0	1	5
10	0	7	4	4	15
11	0	8	0	1	9
12	0	2	0	0	2
13	0	1	1	0	2
14	0	0	0	0	0
15	0	3	0	1	4
16	0	1	1	0	2
17	0	1	2	0	3
18	0	1	1	1	3
OVER 18	0	5	1	3	9
TOTAL	0	68	11	27	106

Table 2D-4.3

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	1	0	0	1	2
4	0	0	0	4	4
5	0	4	0	9	13
6	0	3	0	4	7
7	0	9	0	3	12
8	0	3	0	4	7
9	0	4	3	1	8
10	0	5	2	3	10
11	0	10	0	2	12
12	0	8	2	4	14
13	0	3	2	3	8
14	0	3	1	0	4
15	0	4	4	0	8
16	0	4	2	0	6
17	0	2	1	0	3
18	0	0	3	0	3
OVER 18	0	4	8	1	13
TOTAL	1	66	28	39	134

Table 2D-4.4

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 50

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	1	0	1	2
3	0	0	0	2	2
4	0	1	0	1	2
5	0	4	1	2	7
6	0	5	0	6	11
7	0	9	0	2	11
8	0	3	0	2	5
9	0	5	2	5	12
10	0	8	3	4	15
11	0	4	3	3	10
12	0	13	2	0	15
13	0	2	2	2	6
14	0	5	1	0	6
15	0	8	5	1	14
16	0	2	7	0	9
17	0	4	4	0	8
18	0	2	9	0	11
OVER 18	0	9	29	1	39
TOTAL	0	85	68	32	185

Table 2D-4.5

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	1	0	0	1
4	0	1	0	2	3
5	0	6	0	2	8
6	0	8	0	1	9
7	0	5	0	9	14
8	0	7	1	3	11
9	0	7	1	9	17
10	0	15	8	4	27
11	0	9	5	2	16
12	0	6	3	4	13
13	0	14	4	1	19
14	0	13	3	0	16
15	0	11	5	1	17
16	0	8	10	1	19
17	0	7	9	0	16
18	0	6	11	0	17
OVER 18	0	4	44	0	48
TOTAL	0	128	104	39	271

Table 2D-4.6

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	3	4
4	0	0	0	0	0
5	0	4	1	3	8
6	0	6	0	5	11
7	0	10	1	4	15
8	0	11	1	10	22
9	0	8	1	8	17
10	0	9	7	14	30
11	0	8	8	7	23
12	0	15	9	1	25
13	0	20	15	1	36
14	0	9	9	1	19
15	0	14	13	0	27
16	0	9	4	1	14
17	0	6	11	0	17
18	0	14	19	0	33
OVER 18	0	6	84	5	95
TOTAL	0	150	183	65	398

Table 2D-4.7

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 80

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	2	0	1	3
4	0	1	0	3	4
5	0	2	0	6	8
6	0	8	0	5	13
7	0	10	3	5	18
8	0	9	6	5	20
9	0	11	3	8	22
10	0	27	6	9	42
11	0	19	8	3	30
12	0	25	19	7	51
13	0	15	17	4	36
14	0	16	14	1	31
15	0	9	21	1	31
16	0	11	14	2	27
17	0	8	20	2	30
18	0	11	25	2	38
OVER 18	0	11	77	9	97
TOTAL	0	195	233	74	502

Table 2D-4.8

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
	--------STABILITY CLASSIFICATION-------				
0	0	0	0	1	1
1	0	0	0	1	1
2	0	0	0	0	0
3	0	1	0	1	2
4	0	6	1	3	10
5	0	5	0	6	11
6	0	7	0	10	17
7	0	13	2	5	20
8	0	25	9	6	40
9	0	22	3	2	27
10	0	24	15	7	46
11	0	19	9	3	31
12	0	21	26	5	52
13	0	13	22	0	35
14	0	7	14	0	21
15	0	10	23	0	33
16	0	13	18	0	31
17	0	10	24	0	34
18	0	5	19	1	25
OVER 18	0	7	70	9	86
TOTAL	0	208	255	60	523

Table 2D-4.9

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
	--------STABILITY CLASSIFICATION-------				
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	1	1
4	0	1	0	2	3
5	0	5	2	4	11
6	0	6	2	4	12
7	0	11	2	2	15
8	0	13	7	4	24
9	0	19	10	0	29
10	0	25	12	1	38
11	0	23	10	6	39
12	0	13	29	2	44
13	0	24	29	0	53
14	0	11	16	1	28
15	0	7	29	0	36
16	0	8	14	0	22
17	0	2	20	0	22
13	0	4	16	0	20
OVER 18	0	2	28	4	34
TOTAL	0	174	226	32	432

Table 2D-4.10

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	1	0	0	2	3
1	0	0	0	1	1
2	0	0	0	2	2
3	1	1	0	3	5
4	0	3	1	4	8
5	0	3	0	2	5
6	0	17	3	4	24
7	0	19	6	7	32
8	0	21	4	7	32
9	0	28	14	1	43
10	0	25	12	1	38
11	0	19	15	3	37
12	0	18	15	0	33
13	0	23	36	0	59
14	0	16	27	0	43
15	0	14	36	0	50
16	0	4	14	0	18
17	0	0	7	0	7
18	0	0	10	0	10
OVER 18	0	4	21	1	26
TOTAL	2	215	221	38	476

Table 2D-4.11

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	3	3
1	0	1	0	0	1
2	0	0	0	1	1
3	0	3	1	6	10
4	0	0	0	1	1
5	0	10	3	11	24
6	0	19	5	5	29
7	0	16	7	11	34
8	0	22	12	11	45
9	0	18	8	1	27
10	0	23	15	2	40
11	0	18	11	2	31
12	0	21	13	2	36
13	0	20	20	0	40
14	0	6	11	0	17
15	0	12	17	0	29
16	0	5	4	0	9
17	0	1	8	0	9
18	0	1	5	0	6
OVER 18	0	4	15	4	23
TOTAL	0	200	155	60	415

Table 2D-4.12

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	0	0	3	3
4	0	0	0	3	3
5	0	8	0	8	16
6	0	16	3	6	25
7	0	13	4	5	22
8	0	19	12	7	38
9	0	12	18	0	30
10	0	12	20	4	36
11	0	10	8	1	19
12	0	11	21	2	34
13	0	15	17	0	32
14	0	5	15	0	20
15	0	10	13	0	23
16	0	0	12	0	12
17	0	1	12	0	13
18	0	3	5	0	8
OVER 18	0	4	12	2	18
TOTAL	0	139	172	42	353

Table 2D-4.13

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	3	4
4	0	4	0	3	7
5	0	8	1	3	12
6	0	7	0	4	11
7	0	10	4	7	21
8	0	22	10	2	34
9	0	17	4	1	22
10	0	20	13	1	34
11	0	10	5	3	18
12	0	14	10	1	25
13	0	16	11	0	27
14	0	7	5	2	14
15	0	6	9	1	16
16	0	8	5	0	13
17	0	2	6	0	8
18	0	0	13	0	13
OVER 18	0	1	11	2	14
TOTAL	0	153	107	34	294

Table 2D-4.14

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	1	0	0	0	1
1	0	0	0	0	0
2	1	0	0	1	2
3	0	3	0	4	7
4	0	4	0	4	8
5	0	4	0	1	5
6	0	11	1	3	15
7	0	11	0	1	12
8	0	7	2	2	11
9	0	16	1	3	20
10	0	18	6	3	27
11	0	12	4	2	18
12	0	12	10	1	23
13	0	8	8	1	17
14	0	5	6	0	11
15	0	3	8	1	12
16	0	2	5	0	7
17	0	2	5	0	7
18	0	3	1	0	4
OVER 18	0	3	8	0	11
TOTAL	2	124	65	27	218

Table 2D-4.15

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	1	1
3	0	0	0	1	1
4	0	2	0	1	3
5	0	6	0	4	10
6	0	3	0	1	4
7	0	7	4	6	17
8	0	8	5	4	17
9	0	12	3	6	21
10	0	21	8	1	30
11	0	9	4	3	16
12	0	16	12	3	31
13	0	11	6	2	19
14	0	1	1	1	3
15	0	9	5	1	15
16	0	1	0	0	1
17	0	1	3	0	4
18	0	3	1	0	4
OVER 18	1	3	12	0	16
TOTAL	1	113	64	36	214

Table 2D-4.16

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	1	1
2	0	0	0	2	2
3	0	1	0	1	2
4	0	0	0	2	2
5	0	2	2	2	6
6	0	3	1	5	9
7	0	4	1	2	7
8	0	8	1	2	11
9	0	10	0	0	10
10	0	11	3	0	14
11	0	5	4	1	10
12	0	6	4	0	10
13	0	6	8	0	14
14	0	3	8	0	11
15	0	5	7	0	12
16	0	4	2	0	6
17	0	4	5	0	9
18	0	0	5	0	5
OVER 18	0	5	1	0	6
TOTAL	0	77	52	20	149

Table 2D-4.17

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	3	3
1	0	0	0	0	0
2	0	0	0	2	2
3	0	0	0	3	3
4	0	0	0	7	7
5	0	3	0	6	9
6	0	4	0	5	9
7	0	5	0	6	11
8	0	3	1	3	7
9	0	1	1	1	3
10	0	5	2	2	9
11	0	4	1	1	6
12	0	4	3	1	8
13	0	4	2	0	6
14	0	3	1	0	4
15	0	2	4	0	6
16	0	1	3	0	4
17	0	2	0	0	2
18	0	1	0	0	1
OVER 18	0	0	2	1	3
TOTAL	0	42	20	41	103

Table 2D-4.18

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	1	0	0	1
2	0	0	0	1	1
3	0	0	0	2	2
4	0	0	0	4	4
5	0	1	1	9	11
6	0	2	0	8	10
7	0	3	1	8	12
8	0	4	0	9	13
9	0	5	2	3	10
10	0	4	3	2	9
11	0	4	2	0	6
12	0	7	2	0	9
13	0	8	2	0	10
14	0	3	1	0	4
15	0	2	1	0	3
16	0	1	3	0	4
17	0	3	3	0	6
18	0	0	1	0	1
OVER 18	0	7	4	1	12
TOTAL	0	55	26	49	130

Table 2D-4.19

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	1	0	2	3
2	0	1	0	1	2
3	0	0	0	8	8
4	0	3	0	3	6
5	0	1	0	11	12
6	0	2	1	14	17
7	0	7	0	10	17
8	0	7	1	7	15
9	0	5	2	1	8
10	0	1	4	1	6
11	0	2	0	0	2
12	0	3	2	0	5
13	0	0	1	0	1
14	0	4	1	0	5
15	0	1	1	0	2
16	0	1	1	0	2
17	0	1	1	0	2
18	0	3	0	0	3
OVER 18	0	5	9	3	17
TOTAL	0	48	24	61	133

Table 2D-4.20

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	1	0	0	1
2	0	1	0	3	4
3	0	1	0	9	10
4	0	1	1	9	11
5	0	5	0	18	23
6	0	2	2	8	12
7	0	3	3	5	11
8	0	7	1	3	11
9	0	6	0	2	8
10	0	6	2	3	11
11	0	5	0	1	6
12	0	3	0	0	3
13	0	7	1	0	8
14	0	3	0	0	3
15	0	6	1	0	7
16	0	3	0	0	3
17	0	3	1	0	4
18	0	3	0	0	3
OVER 18	0	13	6	5	24
TOTAL	0	79	18	67	164

Table 2D-4.21

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	2	2
2	0	0	0	3	3
3	0	1	0	9	10
4	0	1	1	22	24
5	0	4	0	24	28
6	0	6	1	16	23
7	0	2	2	8	12
8	0	6	0	6	12
9	0	3	1	4	8
10	0	3	1	0	4
11	0	2	0	1	3
12	0	9	0	1	10
13	0	9	1	0	10
14	0	1	0	0	1
15	0	1	0	0	1
16	0	0	1	0	1
17	0	2	0	0	2
18	0	2	2	0	4
OVER 18	1	7	10	2	20
TOTAL	1	59	20	98	178

Table 2D-4.22

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY	CLASSIFICATION	--------		TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	6	6
1	0	0	0	2	2
2	0	0	0	6	6
3	0	2	0	5	7
4	0	3	0	9	12
5	0	4	0	13	17
6	0	4	1	13	18
7	0	11	2	10	23
8	0	4	2	2	8
9	0	5	3	0	8
10	0	8	0	0	8
11	0	7	0	1	8
12	0	5	0	0	5
13	0	2	1	0	3
14	0	1	0	0	1
15	0	4	2	0	6
16	0	2	0	0	2
17	0	1	0	0	1
18	0	0	0	0	0
OVER 18	1	6	0	1	8
TOTAL	1	69	11	68	149

Table 2D-4.23

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY	CLASSIFICATION	--------		TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	2	2
1	0	0	0	1	1
2	0	0	0	4	4
3	0	1	0	9	10
4	0	0	0	5	5
5	0	4	2	15	21
6	0	5	1	8	14
7	0	10	2	13	25
8	0	10	1	5	16
9	0	4	0	1	5
10	0	4	1	0	5
11	0	1	1	0	2
12	0	2	1	0	3
13	0	0	0	0	0
14	0	2	1	0	3
15	0	1	0	0	1
16	0	1	0	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	C	3	1	7	11
TOTAL	0	48	11	70	129

Table 2D-4.24

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	3	3
2	0	0	0	5	5
3	0	1	0	2	3
4	0	1	0	4	5
5	0	2	1	5	8
6	0	6	1	6	13
7	0	4	2	6	12
8	0	7	2	1	10
9	0	2	3	1	6
10	0	0	0	0	0
11	0	0	1	0	1
12	0	0	0	0	0
13	0	3	1	0	4
14	0	0	0	0	0
15	0	3	0	0	3
16	0	0	0	0	0
17	0	1	0	0	1
18	0	0	0	0	0
OVER 18	0	1	1	5	7
TOTAL	0	31	12	39	82

Table 2D-4.25

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	3	3
2	1	0	0	4	5
3	0	2	0	5	7
4	0	1	1	2	4
5	0	2	1	2	5
6	0	3	0	3	6
7	0	1	0	3	4
8	0	1	0	0	1
9	0	2	0	0	2
10	0	2	0	0	2
11	0	0	0	0	0
12	0	0	0	0	0
13	0	1	0	0	1
14	0	0	0	0	0
15	0	1	0	0	1
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	7	7
TOTAL	1	16	2	30	49

Table 2D-4.26

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	8	8
2	0	0	0	4	4
3	1	2	0	4	7
4	0	2	2	7	11
5	0	0	1	10	11
6	0	0	0	7	7
7	0	6	1	4	11
8	0	5	0	8	13
9	0	1	0	1	2
10	0	1	0	0	1
11	0	0	0	1	1
12	0	0	1	0	1
13	0	1	0	0	1
14	0	0	0	0	0
15	0	1	0	0	1
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	4	3	4	11
TOTAL	1	23	8	60	92

Table 2D-4.27

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	1	0	0	0	1
2	0	0	0	5	5
3	1	1	0	6	8
4	0	0	0	6	6
5	0	1	2	14	17
6	0	2	2	10	14
7	0	2	9	18	29
8	0	0	6	3	9
9	0	0	4	4	8
10	0	2	6	2	10
11	0	0	2	0	2
12	0	3	3	0	6
13	0	3	0	0	3
14	0	3	0	0	3
15	0	2	1	0	3
16	0	3	0	0	3
17	0	3	0	0	3
18	0	3	1	0	4
OVER 18	0	4	2	7	13
TOTAL	2	32	38	76	148

Table 2D-4.28

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	1	1
1	0	0	0	4	4
2	0	0	0	4	4
3	0	1	0	6	7
4	0	0	0	14	14
5	0	2	4	20	26
6	0	2	2	14	18
7	0	6	7	14	27
8	0	2	6	5	13
9	0	1	3	0	4
10	0	9	7	0	16
11	0	1	5	0	6
12	0	7	3	0	10
13	0	3	1	0	4
14	0	1	0	0	1
15	0	1	0	0	1
16	0	2	0	0	2
17	0	2	0	0	2
18	0	3	0	0	3
OVER 18	0	0	8	10	18
TOTAL	0	43	46	92	181

Table 2D-4.29

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	3	3
1	0	0	0	4	4
2	0	0	0	2	2
3	0	0	0	8	8
4	0	1	0	8	9
5	0	3	2	15	20
6	0	2	5	12	19
7	0	2	5	3	10
8	0	6	1	10	17
9	0	1	3	0	4
10	0	5	3	0	8
11	0	0	5	0	5
12	0	4	6	0	10
13	0	2	1	1	4
14	0	3	0	0	3
15	0	0	2	0	2
16	0	1	0	0	1
17	0	2	1	0	3
18	0	2	0	1	3
OVER 18	0	4	3	11	18
TOTAL	0	38	37	78	153

Table 2D-4.30

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	5	5
1	0	0	0	1	1
2	0	0	0	4	4
3	0	0	0	13	13
4	0	0	0	12	12
5	0	2	1	15	18
6	0	0	3	11	14
7	0	2	2	9	13
8	0	3	2	1	6
9	0	2	0	0	2
10	0	0	4	1	5
11	0	4	2	0	6
12	0	0	1	0	1
13	0	7	1	0	8
14	0	1	0	0	1
15	0	3	2	0	5
16	0	1	0	0	1
17	0	1	0	0	1
18	0	2	0	0	2
OVER 18	0	5	0	14	19
TOTAL	0	33	18	86	137

Table 2D-4.31

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. STABILITY — SNE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	1	1
2	0	0	0	4	4
3	0	0	0	7	7
4	0	3	0	5	8
5	0	1	0	17	18
6	0	4	2	16	22
7	0	4	2	17	23
8	0	9	4	12	25
9	0	4	6	7	17
10	0	9	5	4	18
11	0	1	7	1	9
12	0	4	8	1	13
13	0	4	3	0	7
14	0	1	1	0	2
15	0	4	0	0	4
16	0	2	3	0	5
17	0	1	1	0	2
18	0	1	1	0	2
OVER 18	0	2	2	2	6
TOTAL	0	54	45	96	195

Table 2D-4.32

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	4	4
1	0	0	0	1	1
2	0	0	0	1	1
3	0	1	0	7	8
4	0	0	0	10	10
5	0	5	1	19	25
6	0	1	1	12	14
7	0	6	1	16	23
8	0	9	2	21	32
9	0	5	3	24	32
10	0	10	11	7	28
11	0	8	11	7	26
12	0	3	17	5	25
13	0	9	8	2	19
14	0	0	5	1	6
15	0	7	1	0	8
16	0	1	2	0	3
17	0	1	0	0	1
18	0	1	5	0	6
OVER 18	0	8	14	10	32
TOTAL	0	75	82	147	304

Table 2D-4.33

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	3	3
4	0	0	0	4	4
5	0	3	2	13	18
6	0	4	1	13	18
7	0	3	2	14	19
8	0	10	4	7	21
9	0	5	3	18	26
10	0	9	2	14	25
11	0	6	2	5	13
12	0	13	6	8	27
13	0	14	12	3	29
14	0	8	4	1	13
15	0	8	10	0	18
16	0	2	4	0	6
17	0	1	2	0	3
18	0	3	3	0	6
OVER 18	0	9	33	8	50
TOTAL	0	98	90	111	299

Table 2D-4.34

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	3	3
1	0	0	0	1	1
2	0	1	0	1	2
3	0	0	0	4	4
4	0	1	0	5	6
5	0	0	0	4	4
6	0	2	0	9	11
7	0	3	0	4	7
8	0	9	0	7	16
9	0	5	1	9	15
10	0	11	0	9	20
11	0	6	2	1	9
12	0	8	2	3	13
13	0	11	2	0	13
14	0	5	1	1	7
15	0	2	2	1	5
16	0	2	3	0	5
17	0	1	1	0	2
18	0	2	5	0	7
OVER 18	0	6	22	3	31
TOTAL	0	75	41	65	181

Table 2D-4.35

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	1	1
1	0	0	0	1	1
2	0	0	0	2	2
3	0	1	0	3	4
4	0	0	0	1	1
5	0	2	0	6	8
6	0	4	0	3	7
7	0	1	0	2	3
8	0	8	1	4	13
9	0	2	2	2	6
10	0	9	2	4	15
11	0	2	3	3	8
12	0	4	2	6	12
13	0	7	3	1	11
14	0	1	0	1	2
15	0	2	3	0	5
16	0	1	0	0	1
17	0	0	1	0	1
18	0	1	6	0	7
OVER 18	0	12	11	6	29
TOTAL	0	57	34	46	137

Table 2D-4.36

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	2	0	0	51	53
1	1	4	0	38	43
2	2	4	0	70	76
3	4	33	1	150	188
4	0	42	7	174	223
5	0	129	29	313	471
6	0	188	41	259	488
7	0	248	76	245	569
8	0	300	106	189	595
9	0	264	108	125	497
10	0	362	188	110	660
11	0	241	138	66	445
12	0	285	233	59	577
13	0	298	238	21	557
14	0	152	147	10	309
15	0	183	227	10	420
16	0	104	132	4	240
17	0	78	148	2	228
18	0	80	168	5	253
OVER 18	3	183	561	155	902
TOTAL	12	3178	2548	2056	7794

Table 2D-4.37

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	1	0	1	0	0	0	2
4	0	0	0	1	1	0	0	2
5	0	3	1	3	0	0	0	7
6	0	4	0	0	1	0	0	5
7	0	0	2	0	0	0	0	2
8	0	3	0	1	0	0	0	4
9	0	4	2	1	0	0	0	7
10	0	4	2	2	0	0	0	8
11	0	3	1	0	0	0	0	4
12	0	2	1	0	0	0	0	3
13	0	5	3	0	0	0	0	8
14	0	3	0	0	0	0	0	3
15	0	2	1	0	0	0	0	3
16	0	0	0	0	0	0	0	0
17	0	1	0	0	0	0	0	1
18 & OVER	0	3	0	0	0	0	0	3
TOTAL	0	38	13	10	2	0	0	63

Table 2D-5.1

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	1	2	1	0	0	4
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	2	1	1	0	0	0	4
4	0	1	1	0	0	0	0	2
5	0	1	5	4	1	0	0	11
6	0	2	3	5	0	0	0	10
7	0	7	1	0	0	0	0	8
8	0	3	3	2	0	0	1	9
9	0	4	1	1	0	0	0	6
10	0	7	3	0	0	0	0	10
11	0	2	0	1	0	0	0	3
12	0	2	2	1	0	0	0	5
13	0	2	2	0	0	0	0	4
14	0	2	1	0	0	0	0	3
15	0	2	3	2	0	0	0	7
16	0	0	0	0	0	0	0	0
17	0	1	0	0	0	0	0	1
18 & OVER	0	2	3	0	0	0	0	5
TOTAL	0	40	30	19	2	0	1	92

Table 2D-5.2

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	1	2	3	0	0	0	6
4	0	0	1	0	0	1	0	2
5	0	2	3	2	2	0	0	9
6	1	3	3	3	0	0	0	10
7	0	8	8	1	0	0	0	17
8	0	4	1	2	0	0	0	7
9	0	4	0	1	0	0	0	5
10	0	5	5	5	0	0	0	15
11	0	7	1	1	0	0	0	9
12	0	1	1	0	0	0	0	2
13	0	2	0	0	0	0	0	2
14	0	0	0	0	0	0	0	0
15	0	3	1	0	0	0	0	4
16	0	1	1	0	0	0	0	2
17	0	1	2	0	0	0	0	3
18 & OVER	0	1	3	0	0	0	0	4
TOTAL	1	43	32	18	2	1	0	97

Table 2D-5.3

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	1	1	0	0	0	2
4	0	0	0	3	0	0	1	4
5	0	2	4	7	0	0	0	13
6	0	2	1	3	0	0	1	7
7	0	6	5	1	0	0	0	12
8	0	2	1	4	0	0	0	7
9	0	3	4	1	0	0	0	8
10	0	3	5	2	0	0	0	10
11	0	8	2	2	0	0	0	12
12	0	7	3	4	0	0	0	14
13	0	4	1	3	0	0	0	8
14	0	1	3	0	0	0	0	4
15	0	1	6	1	0	0	0	8
16	0	1	4	1	0	0	0	6
17	0	0	2	1	0	0	0	3
18 & OVER	0	3	3	0	0	0	0	6
TOTAL	0	43	45	34	0	0	2	124

Table 2D-5.4

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 50

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0	2
3	0	0	1	1	0	0	0	2
4	0	0	1	1	0	0	0	2
5	0	2	2	2	1	0	0	7
6	0	2	5	2	2	0	0	11
7	0	5	4	2	0	0	0	11
8	0	1	3	1	0	0	0	5
9	0	2	4	6	0	0	0	12
10	0	6	4	5	0	0	0	15
11	0	2	6	2	0	0	0	10
12	0	10	4	1	0	0	0	15
13	0	0	2	4	0	0	0	6
14	0	3	2	1	0	0	0	6
15	0	2	11	1	0	0	0	14
16	0	2	5	2	0	0	0	9
17	0	3	2	3	0	0	0	8
18 & OVER	0	16	16	2	0	0	0	34
TOTAL	0	56	73	37	3	0	0	169

Table 2D-5.5

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	1	0	0	0	1
4	0	0	1	1	1	0	0	3
5	0	2	3	3	0	0	0	8
6	0	5	1	3	0	0	0	9
7	0	4	1	7	2	0	0	14
8	0	6	5	0	0	0	0	11
9	0	4	5	8	0	0	0	17
10	0	9	10	8	0	0	0	27
11	0	7	5	4	0	0	0	16
12	0	6	2	5	0	0	0	13
13	0	11	8	1	0	0	0	20
14	0	9	4	3	0	0	0	16
15	0	5	3	9	0	0	0	17
16	0	5	8	6	0	0	0	19
17	0	7	8	1	0	0	0	16
18 & OVER	0	13	25	8	0	0	0	46
TOTAL	0	93	89	68	3	0	0	253

Table 2D-5.6

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	0	1	3	0	0	0	4
4	0	0	0	0	0	0	0	0
5	0	1	5	2	0	0	0	8
6	0	5	2	4	0	0	0	11
7	0	6	3	5	1	0	0	15
8	0	8	3	10	1	0	0	22
9	0	6	7	4	0	0	0	17
10	0	5	9	16	0	0	0	30
11	0	8	7	8	0	0	0	23
12	0	11	7	7	0	0	0	25
13	0	10	17	9	0	0	0	36
14	0	6	7	6	0	0	0	19
15	0	8	12	4	0	0	0	24
16	0	8	4	2	0	0	0	14
17	0	6	5	6	0	0	0	17
18 & OVER	0	24	30	14	0	0	0	68
TOTAL	0	112	119	102	2	0	0	335

Table 2D-5.7

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 80

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	1	1	1	0	0	0	3
4	0	1	1	2	0	0	0	4
5	0	3	1	3	1	0	0	8
6	0	3	3	7	0	0	0	13
7	0	5	8	5	0	0	0	18
8	0	4	6	10	0	0	0	20
9	0	4	8	10	0	0	0	22
10	0	18	10	14	0	0	0	42
11	0	16	8	5	0	1	0	30
12	0	20	11	20	0	0	0	51
13	0	9	13	14	0	0	0	36
14	0	15	8	8	0	0	0	31
15	0	8	11	12	0	0	0	31
16	0	13	6	8	0	0	0	27
17	0	9	15	6	0	0	0	30
18 & OVER	0	13	17	17	0	0	0	47
TOTAL	0	142	127	143	1	1	0	414

Table 2D-5.8

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	1	0	0	1
1	0	0	0	1	0	0	0	1
2	0	0	0	0	0	0	0	0
3	0	0	1	1	0	0	0	2
4	0	3	3	4	0	0	0	10
5	0	2	4	5	0	0	0	11
6	0	5	5	7	0	0	0	17
7	0	9	4	7	0	0	0	20
8	0	23	7	10	0	0	0	40
9	0	15	8	4	0	0	0	27
10	0	16	17	12	1	0	0	46
11	0	13	10	8	0	0	0	31
12	0	13	27	12	0	0	0	52
13	0	10	19	6	0	0	0	35
14	0	9	11	1	0	0	0	21
15	0	12	17	4	0	0	0	33
16	0	14	15	2	0	0	0	31
17	0	11	20	3	0	0	0	34
18 & OVER	0	6	26	5	1	0	0	38
TOTAL	0	161	194	92	3	0	0	450

Table 2D-5.9

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	0	0	1	0	0	0	1
4	0	1	0	2	0	0	0	3
5	0	2	3	6	0	0	0	11
6	0	1	7	4	1	0	0	13
7	0	6	4	5	0	0	0	15
8	0	8	7	9	0	0	0	24
9	0	11	9	9	0	0	0	29
10	0	17	15	6	0	0	0	38
11	0	15	17	7	0	0	0	39
12	0	14	28	2	0	0	0	44
13	0	25	23	5	0	0	0	53
14	0	11	12	5	0	0	0	28
15	0	8	22	5	0	0	0	35
16	0	5	9	8	0	0	0	22
17	0	2	13	7	0	0	0	22
18 & OVER	0	3	21	5	0	0	0	29
TOTAL	0	129	190	87	1	0	0	407

Table 2D-5.10

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	3	0	0	0	3
1	0	0	0	1	0	0	0	1
2	0	0	0	2	0	0	0	2
3	0	0	3	2	0	0	0	5
4	0	0	2	6	0	0	0	8
5	0	1	2	1	1	0	0	5
6	0	9	12	3	0	0	0	24
7	0	10	15	7	0	0	0	32
8	0	13	11	9	0	0	0	33
9	0	19	18	6	0	0	0	43
10	0	17	18	4	0	0	0	39
11	0	16	16	5	0	0	0	37
12	0	15	13	5	0	0	0	33
13	0	24	26	9	0	0	0	59
14	0	15	22	6	0	0	0	43
15	0	8	36	5	0	0	0	49
16	0	1	15	2	0	0	0	18
17	0	0	7	0	0	0	0	7
18 & OVER	0	0	15	0	0	0	0	15
TOTAL	0	148	231	76	1	0	0	456

Table 2D-5.11

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	1	0	0	3
1	0	1	0	0	0	0	0	1
2	0	0	1	0	0	0	0	1
3	0	2	1	6	1	0	0	10
4	0	0	0	1	0	0	0	1
5	0	4	9	10	1	0	0	24
6	0	6	17	6	0	0	0	29
7	0	8	15	12	0	0	0	35
8	0	10	27	8	0	0	0	45
9	0	8	18	1	0	0	0	27
10	0	11	23	6	0	0	0	40
11	0	9	20	2	0	0	0	31
12	0	14	19	3	0	0	0	36
13	0	15	20	5	0	0	0	40
14	0	6	8	3	0	0	0	17
15	0	11	17	1	0	0	0	29
16	0	2	5	2	0	0	0	9
17	0	2	3	4	0	0	0	9
18 & OVER	0	1	9	1	0	0	0	11
TOTAL	0	110	212	73	3	0	0	398

Table 2D-5.12

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	1
3	0	0	1	1	1	0	0	3
4	0	0	0	2	1	0	0	3
5	0	3	7	9	0	0	0	19
6	0	4	15	4	2	0	0	25
7	0	8	9	5	0	0	0	22
8	0	12	21	5	0	0	0	38
9	0	2	26	2	0	0	0	30
10	0	7	27	2	0	0	0	36
11	0	5	13	1	0	0	0	19
12	0	7	25	2	0	0	0	34
13	0	12	17	3	0	0	0	32
14	0	4	12	4	0	0	0	20
15	0	7	10	5	0	0	0	22
16	0	0	6	6	0	0	0	12
17	0	2	7	4	0	0	0	13
18 & OVER	0	5	9	2	0	0	0	16
TOTAL	0	78	206	57	4	0	0	345

Table 2D-5.13

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	0	3	1	0	0	0	4
4	0	0	5	2	0	0	0	7
5	0	4	6	2	0	0	0	12
6	0	3	4	4	0	0	0	11
7	0	6	7	6	2	0	0	21
8	0	12	19	3	0	0	0	34
9	0	11	8	3	0	0	0	22
10	0	12	20	2	0	0	0	34
11	0	7	10	1	0	0	0	18
12	0	11	10	4	0	0	0	25
13	0	11	15	1	0	0	0	27
14	0	3	8	3	0	0	0	14
15	0	3	10	3	0	0	0	16
16	0	5	7	1	0	0	0	13
17	0	3	4	1	0	0	0	8
18 & OVER	0	1	9	8	0	0	0	18
TOTAL	0	92	145	46	2	0	0	285

Table 2D-5.14

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	0	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	2	0	0	0	2
3	0	2	2	3	0	0	0	7
4	0	2	3	3	0	0	0	8
5	0	0	3	2	0	0	0	5
6	0	2	12	1	0	0	0	15
7	0	7	2	3	0	0	0	12
8	0	3	7	1	0	0	0	11
9	0	9	6	5	0	0	0	20
10	0	8	12	7	0	0	0	27
11	0	9	7	2	0	0	0	18
12	0	5	13	4	0	0	0	22
13	0	4	10	3	0	0	0	17
14	0	2	7	2	0	0	0	11
15	0	3	7	2	0	0	0	12
16	0	1	5	1	0	0	0	7
17	0	1	3	3	0	0	0	7
18 & OVER	0	3	5	0	0	0	0	8
TOTAL	0	61	105	44	0	0	0	210

Table 2D-5.15

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	1
2	0	0	1	0	0	0	0	1
3	0	0	1	0	0	0	0	1
4	0	0	2	1	0	0	0	3
5	0	1	4	5	0	0	0	10
6	0	1	1	1	1	0	0	4
7	0	4	10	1	2	0	0	17
8	0	2	9	6	0	0	0	17
9	0	6	7	8	0	0	0	21
10	0	13	11	6	0	0	0	30
11	0	6	6	4	0	0	0	16
12	0	10	13	5	0	0	0	28
13	0	10	5	4	0	0	0	19
14	0	1	1	1	0	0	0	3
15	0	6	6	3	0	0	0	15
16	0	0	1	0	0	0	0	1
17	0	3	1	0	0	0	0	4
18 & OVER	0	6	7	1	0	0	0	14
TOTAL	0	69	86	47	3	0	0	205

Table 2D-5.16

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	1	0	0	0	1
2	0	0	1	1	0	0	0	2
3	0	0	1	1	0	0	0	2
4	0	0	0	2	0	0	0	2
5	0	0	3	2	1	0	0	6
6	0	0	1	6	2	0	0	9
7	0	1	3	2	1	0	0	7
8	0	1	9	1	0	0	0	11
9	0	2	4	4	0	0	0	10
10	0	8	5	1	0	0	0	14
11	0	3	3	4	0	0	0	10
12	0	6	2	2	0	0	0	10
13	0	5	5	4	0	0	0	14
14	0	6	2	3	0	0	0	11
15	0	6	3	3	0	0	0	12
16	0	5	0	1	0	0	0	6
17	0	4	1	4	0	0	0	9
18 & OVER	0	3	1	2	0	0	0	6
TOTAL	0	50	44	46	4	0	0	144

Table 2D-5.17

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	2	0	1	0	0	3
1	0	0	0	0	0	0	0	0
2	0	0	0	2	0	0	0	2
3	0	0	1	2	0	0	0	3
4	0	0	0	5	2	0	0	7
5	0	1	2	3	3	0	0	9
6	0	1	4	2	2	0	0	9
7	0	2	2	6	1	0	0	11
8	0	1	3	2	1	0	0	7
9	0	0	2	1	0	0	0	3
10	0	5	0	4	0	0	0	9
11	0	4	1	1	0	0	0	6
12	0	3	0	5	0	0	0	8
13	0	2	4	0	0	0	0	6
14	0	1	2	1	0	0	0	4
15	0	3	1	2	0	0	0	6
16	0	1	1	2	0	0	0	4
17	0	2	0	0	0	0	0	2
18 & OVER	0	1	0	1	0	0	0	2
TOTAL	0	27	25	39	10	0	0	101

Table 2D-5.18

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	1	0	0	0	0	1
2	0	0	0	1	0	0	0	1
3	0	0	0	2	0	0	0	2
4	0	1	0	3	0	0	0	4
5	0	0	1	10	0	0	0	11
6	0	1	0	8	1	0	0	10
7	0	0	5	6	1	0	0	12
8	0	1	4	8	0	0	0	13
9	0	4	1	5	0	0	0	10
10	0	2	3	4	0	0	0	9
11	0	3	1	2	0	0	0	6
12	0	6	2	1	0	0	0	9
13	0	7	1	2	0	0	0	10
14	0	3	0	1	0	0	0	4
15	0	1	2	0	0	0	0	3
16	0	1	1	2	0	0	0	4
17	0	3	1	2	0	0	0	6
18 & OVER	0	3	3	0	0	0	0	6
TOTAL	0	36	26	59	2	0	0	123

Table 2D-5.19

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	2	1	0	0	0	3
2	0	0	1	1	0	0	0	2
3	0	0	0	8	0	0	0	8
4	0	0	2	4	0	0	0	6
5	0	0	1	10	1	0	0	12
6	0	0	3	12	2	0	0	17
7	0	3	6	6	2	0	0	17
8	0	2	7	5	1	0	0	15
9	0	4	1	3	0	0	0	8
10	0	1	2	3	0	0	0	6
11	0	2	0	0	0	0	0	2
12	0	4	1	0	0	0	0	5
13	0	0	1	0	0	0	0	1
14	0	3	1	1	0	0	0	5
15	0	1	1	0	0	0	0	2
16	0	1	1	0	0	0	0	2
17	0	2	0	0	0	0	0	2
18 & OVER	0	4	1	0	0	0	0	5
TOTAL	0	27	31	54	6	0	0	118

Table 2D-5.20

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	1	0	0	0	1
2	0	0	1	3	0	0	0	4
3	0	0	1	8	1	0	0	10
4	0	0	2	9	0	0	0	11
5	0	3	0	17	3	0	0	23
6	0	0	1	8	3	0	0	12
7	0	1	2	7	1	0	0	11
8	0	3	2	6	0	0	0	11
9	0	3	3	2	0	0	0	8
10	0	5	1	4	1	0	0	11
11	0	3	3	0	0	0	0	6
12	0	1	1	1	0	0	0	3
13	0	6	1	1	0	0	0	8
14	0	1	1	1	0	0	0	3
15	0	6	0	1	0	0	0	7
16	0	3	0	0	0	0	0	3
17	0	3	1	0	0	0	0	4
18 & OVER	0	4	1	0	0	0	0	5
TOTAL	0	42	21	70	9	0	0	142

Table 2D-5.21

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	2	0	0	0	2
2	0	0	0	2	1	0	0	3
3	0	0	1	9	0	0	0	10
4	0	0	3	18	3	0	0	24
5	0	1	1	21	5	0	0	28
6	0	1	3	18	1	0	0	23
7	0	2	2	8	0	0	0	12
8	0	5	2	5	0	0	0	12
9	0	1	2	5	0	0	0	8
10	0	3	1	0	0	0	0	4
11	0	2	0	1	0	0	0	3
12	0	7	1	1	1	0	0	10
13	0	6	2	2	0	0	0	10
14	0	1	0	0	0	0	0	1
15	0	1	0	0	0	0	0	1
16	0	0	1	0	0	0	0	1
17	0	2	0	0	0	0	0	2
18 & OVER	0	3	2	1	0	0	0	6
TOTAL	0	35	21	93	11	0	0	160

Table 2D-5.22

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	4	2	0	6
1	0	0	0	2	0	0	0	2
2	0	0	1	4	1	0	0	6
3	0	0	2	4	1	0	0	7
4	0	1	1	7	3	0	0	12
5	0	0	4	10	3	0	0	17
6	0	1	2	14	1	0	0	18
7	0	4	4	14	1	0	0	23
8	0	5	1	2	0	0	0	8
9	0	2	2	4	0	0	0	8
10	0	6	2	0	0	0	0	8
11	0	4	4	0	0	0	0	8
12	0	2	2	1	0	0	0	5
13	0	2	1	0	0	0	0	3
14	0	0	0	1	0	0	0	1
15	0	5	0	1	0	0	0	6
16	0	0	2	0	0	0	0	2
17	0	1	0	0	0	0	0	1
18 & OVER	0	0	1	0	0	0	0	1
TOTAL	0	33	29	64	14	2	0	142

Table 2D-5.23

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	1	0	0	0	1
2	0	0	0	3	1	0	0	4
3	0	0	1	7	2	0	0	10
4	0	0	0	3	2	0	0	5
5	0	1	4	13	3	0	0	21
6	0	1	2	9	2	0	0	14
7	0	5	7	9	4	0	0	25
8	0	9	2	5	0	0	0	16
9	0	1	3	1	0	0	0	5
10	0	3	1	1	0	0	0	5
11	0	1	0	1	0	0	0	2
12	0	1	2	0	0	0	0	3
13	0	0	0	0	0	0	0	0
14	0	2	1	0	0	0	0	3
15	0	0	1	0	0	0	0	1
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	25	24	55	14	0	0	118

Table 2D-5.24

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	1	1	1	0	3
2	0	0	0	4	1	0	0	5
3	0	0	0	2	1	0	0	3
4	0	0	0	4	1	0	0	5
5	0	1	1	5	1	0	0	8
6	0	1	3	8	0	1	0	13
7	0	2	3	3	4	0	0	12
8	0	1	7	2	0	0	0	10
9	0	1	2	3	0	0	0	6
10	0	0	0	0	0	0	0	0
11	0	1	0	0	0	0	0	1
12	0	0	0	0	0	0	0	0
13	0	3	1	0	0	0	0	4
14	0	0	0	0	0	0	0	0
15	0	2	1	0	0	0	0	3
16	0	0	0	0	0	0	0	0
17	0	0	1	0	0	0	0	1
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	12	19	33	9	2	0	75

Table 2D-5.25

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	3	0	0	0	3
2	0	0	1	4	0	0	0	5
3	0	0	0	6	1	0	0	7
4	0	0	0	3	1	0	0	4
5	0	0	2	3	0	0	0	5
6	0	0	1	3	2	0	0	6
7	0	0	2	2	0	0	0	4
8	0	1	0	0	0	0	0	1
9	0	1	0	1	0	0	0	2
10	0	1	0	1	0	0	0	2
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	1	0	0	0	0	1
14	0	0	0	0	0	0	0	0
15	0	1	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	4	7	27	4	0	0	42

Table 2D-5.26

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	2	6	0	0	0	8
2	0	0	0	2	2	0	0	4
3	0	0	0	7	0	0	0	7
4	0	0	1	9	1	0	0	11
5	0	0	0	8	3	0	0	11
6	0	0	0	2	4	1	0	7
7	0	5	1	4	1	0	0	11
8	0	2	1	9	1	0	0	13
9	0	1	0	1	0	0	0	2
10	0	1	0	0	0	0	0	1
11	0	0	0	1	0	0	0	1
12	0	0	1	0	0	0	0	1
13	0	1	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0
15	0	1	0	0	0	0	0	1
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	1	0	0	0	0	0	1
TOTAL	0	12	6	51	12	1	0	82

Table 2D-5.27

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	0	0	0	0	1
1	0	0	0	1	0	0	0	1
2	0	0	0	4	1	0	0	5
3	0	0	0	7	1	0	0	8
4	0	0	0	5	1	0	0	6
5	0	1	0	12	3	1	0	17
6	0	0	2	11	1	0	0	14
7	0	0	5	17	7	0	0	29
8	0	0	3	6	0	0	0	9
9	0	1	3	4	0	0	0	8
10	0	1	7	2	0	0	0	10
11	0	0	2	0	0	0	0	2
12	0	3	3	0	0	0	0	6
13	0	2	1	0	0	0	0	3
14	0	2	1	0	0	0	0	3
15	0	2	1	0	0	0	0	3
16	0	2	0	1	0	0	0	3
17	0	3	0	0	0	0	0	3
18 & OVER	0	5	1	0	0	0	0	6
TOTAL	0	22	30	70	14	1	0	137

Table 2D-5.28

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	2	2	0	0	0	4
2	0	0	0	3	1	0	0	4
3	0	0	0	7	0	0	0	7
4	0	0	0	13	1	0	0	14
5	0	0	2	19	5	0	0	26
6	0	0	2	12	4	0	0	18
7	0	1	7	18	1	0	0	27
8	0	0	3	10	0	0	0	13
9	0	1	3	0	0	0	0	4
10	0	5	8	3	0	0	0	16
11	0	1	5	0	0	0	0	6
12	0	6	4	0	0	0	0	10
13	0	3	1	0	0	0	0	4
14	0	1	0	0	0	0	0	1
15	0	1	0	0	0	0	0	1
16	0	2	0	0	0	0	0	2
17	0	2	0	0	0	0	0	2
18 & OVER	0	4	0	0	0	0	0	4
TOTAL	0	27	37	88	12	0	0	164

Table 2D-5.29

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	3	0	0	0	3
1	0	0	1	3	0	0	0	4
2	0	0	0	1	1	0	0	2
3	0	0	0	3	4	1	0	8
4	0	0	0	8	1	0	0	9
5	0	2	0	12	5	1	0	20
6	0	0	3	10	6	0	0	19
7	0	0	3	5	2	0	0	10
8	0	2	2	10	3	0	0	17
9	0	0	3	1	0	0	0	4
10	0	2	5	1	0	0	0	8
11	0	2	3	0	0	0	0	5
12	0	5	4	1	0	0	0	10
13	0	3	1	0	0	0	0	4
14	0	3	0	0	0	0	0	3
15	0	2	0	0	0	0	0	2
16	0	1	0	0	0	0	0	1
17	0	2	1	0	0	0	0	3
18 & OVER	0	4	0	1	0	0	0	5
TOTAL	0	28	26	59	22	2	0	137

Table 2D-5.30

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	1	0	2	1	1	0	5
1	0	0	0	1	0	0	0	1
2	0	0	0	0	3	1	0	4
3	0	0	0	7	4	2	0	13
4	0	0	0	3	7	1	1	12
5	0	1	0	12	2	3	0	18
6	0	0	1	9	2	1	1	14
7	0	0	4	6	1	2	0	13
8	0	1	2	2	1	0	0	6
9	0	0	2	0	0	0	0	2
10	0	1	3	1	0	0	0	5
11	0	2	3	1	0	0	0	6
12	0	0	1	0	0	0	0	1
13	0	6	2	0	0	0	0	8
14	0	1	0	0	0	0	0	1
15	0	4	1	0	0	0	0	5
16	0	1	0	0	0	0	0	1
17	0	1	0	0	0	0	0	1
18 & OVER	0	2	0	0	0	0	0	2
TOTAL	0	21	19	44	21	11	2	118

Table 2D-5.31

TURKEY POINT DATA

YEAR: 1969 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	1	0	0	0	1
2	0	0	0	2	1	1	0	4
3	0	0	0	0	6	1	0	7
4	0	1	1	4	1	0	1	8
5	0	0	1	11	4	2	0	18
6	0	0	1	12	5	4	0	22
7	0	1	5	9	3	4	1	23
8	0	0	6	15	2	2	0	25
9	0	1	4	11	1	0	0	17
10	0	5	7	5	0	1	0	18
11	0	0	8	0	1	0	0	9
12	0	1	9	2	0	1	0	13
13	0	6	1	0	0	0	0	7
14	0	2	0	0	0	0	0	2
15	0	4	0	0	0	0	0	4
16	0	1	4	0	0	0	0	5
17	0	1	1	0	0	0	0	2
18 & OVER	0	1	2	0	0	0	0	3
TOTAL	0	24	50	74	24	16	2	190

Table 2D-5.32

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	4	0	0	0	4
1	0	0	0	0	1	0	0	1
2	0	0	0	1	0	0	0	1
3	0	0	1	4	3	0	0	8
4	0	0	0	5	3	2	0	10
5	0	0	7	6	9	2	1	25
6	0	0	1	7	4	0	2	14
7	0	2	3	10	4	3	1	23
8	0	3	2	18	7	2	0	32
9	0	2	6	9	13	1	1	32
10	0	4	9	11	4	0	0	28
11	0	7	6	11	2	0	0	26
12	0	1	12	11	1	0	0	25
13	0	4	9	6	0	0	0	19
14	0	0	3	3	0	0	0	6
15	0	6	2	0	0	0	0	8
16	0	1	2	0	0	0	0	3
17	0	1	0	0	0	0	0	1
18 & OVER	0	4	4	0	0	0	0	8
TOTAL	0	35	67	106	51	10	5	274

Table 2D-5.33

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	1	1	0	1	3
4	0	1	0	1	0	1	1	4
5	0	1	3	8	4	0	2	18
6	0	1	3	11	2	1	0	18
7	0	0	2	14	3	0	0	19
8	0	4	3	10	2	0	2	21
9	0	3	1	17	4	1	0	26
10	0	3	4	17	1	0	0	25
11	0	2	5	5	1	0	0	13
12	0	9	6	12	0	0	0	27
13	0	11	9	9	0	0	0	29
14	0	8	5	0	0	0	0	13
15	0	6	8	4	0	0	0	18
16	0	2	4	0	0	0	0	6
17	0	0	1	2	0	0	0	3
18 & OVER	0	2	5	0	0	0	0	7
TOTAL	0	53	59	111	18	3	6	250

Table 2D-5.34

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	1	0	3
1	0	0	0	1	0	0	0	1
2	0	0	1	1	0	0	0	2
3	0	0	0	2	1	1	0	4
4	0	1	2	1	1	1	0	6
5	0	0	3	1	0	0	0	4
6	0	2	2	6	0	1	0	11
7	0	1	2	4	0	0	0	7
8	0	7	1	6	2	0	0	16
9	0	6	0	7	2	0	0	15
10	0	9	1	8	2	0	0	20
11	0	6	2	1	0	0	0	9
12	0	7	0	6	0	0	0	13
13	0	6	3	4	0	0	0	13
14	0	4	1	2	0	0	0	7
15	0	2	2	1	0	0	0	5
16	0	0	1	4	0	0	0	5
17	0	0	2	0	0	0	0	2
18 & OVER	0	2	7	0	0	0	0	9
TOTAL	0	53	30	57	8	4	0	152

Table 2D-5.35

TURKEY POINT DATA

YEAR: 1969 | 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT | SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	0	0	0	0	1
1	0	0	0	1	0	0	0	1
2	0	1	0	1	0	0	0	2
3	0	2	1	1	0	0	0	4
4	0	1	0	0	0	0	0	1
5	0	2	3	2	0	0	1	8
6	0	2	2	3	0	0	0	7
7	0	1	1	1	0	0	0	3
8	0	6	3	4	0	0	0	13
9	0	1	2	3	0	0	0	6
10	0	8	4	3	0	0	0	15
11	0	2	3	3	0	0	0	8
12	0	4	2	6	0	0	0	12
13	0	7	3	1	0	0	0	11
14	0	1	0	1	0	0	0	2
15	0	1	4	0	0	0	0	5
16	0	1	0	0	0	0	0	1
17	0	0	1	0	0	0	0	1
18 & OVER	0	4	9	1	0	0	0	14
TOTAL	0	44	39	31	0	0	1	115

Table 2D-5.36

TURKEY POINT DATA

YEAR: 1969 — 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT — SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	1	6	33	9	4	0	53
1	0	1	8	31	2	1	0	43
2	0	1	10	50	13	2	0	76
3	0	11	28	115	28	5	1	188
4	0	14	32	136	31	6	4	223
5	0	47	100	251	62	9	4	473
6	1	68	128	228	51	9	4	489
7	0	130	167	218	44	9	2	570
8	0	168	193	207	21	4	3	596
9	0	147	175	152	20	2	1	497
10	0	231	254	166	9	1	0	661
11	0	178	178	84	4	1	0	445
12	0	214	232	124	2	1	0	573
13	0	234	228	96	0	0	0	558
14	0	129	123	57	0	0	0	309
15	0	144	200	69	0	0	0	413
16	0	81	108	51	0	0	0	240
17	0	79	102	47	0	0	0	228
18 & OVER	0	147	235	69	1	0	0	452
TOTAL	1	2025	2507	2184	297	54	19	7087

Table 2D-5.37

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	0	1
4	0	1	1	0	2
5	0	1	0	4	5
6	0	5	0	0	5
7	0	2	0	6	8
8	0	7	0	5	12
9	0	2	0	2	4
10	0	3	0	1	4
11	0	3	0	0	3
12	0	8	0	1	9
13	0	0	0	0	0
14	0	1	0	0	1
15	0	1	0	0	1
16	0	1	0	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	[illegible]
TOTAL	0	30	1	26	57

Table 2D-6.1

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	2	2
3	0	2	0	2	4
4	0	1	0	2	3
5	0	3	1	1	5
6	0	13	0	5	18
7	0	9	1	5	15
8	0	2	0	5	7
9	0	4	0	2	6
10	0	6	0	6	12
11	0	0	0	5	5
12	0	4	0	0	4
13	0	4	1	0	5
14	0	2	1	0	3
15	0	3	0	0	3
16	0	0	0	0	0
17	0	0	0	0	0
18	0	4	0	0	4
OVER 18	0	3	1	0	4
TOTAL	0	60	5	36	101

Table 2D-6.2

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	5	5
3	0	0	0	4	4
4	0	3	0	4	7
5	0	10	0	6	16
6	0	3	1	4	8
7	0	7	2	3	12
8	0	7	0	5	12
9	0	5	0	3	8
10	0	10	1	2	13
11	0	6	0	0	6
12	0	5	0	1	6
13	0	8	1	0	9
14	0	2	0	0	2
15	0	3	3	1	7
16	0	3	5	0	8
17	0	0	3	0	3
18	0	0	2	0	2
OVER 18	0	5	1	0	6
TOTAL	0	77	19	39	135

Table 2D-6.3

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	1	3	4
4	0	4	0	3	7
5	0	6	0	9	15
6	0	9	0	2	11
7	0	6	0	8	14
8	0	10	1	6	17
9	0	11	3	12	26
10	0	11	0	12	23
11	0	5	1	3	9
12	0	4	6	0	10
13	0	3	4	3	10
14	0	7	7	0	14
15	0	8	3	1	12
16	0	2	10	0	12
17	0	3	3	0	6
18	0	3	7	0	10
OVER 18	0	5	16	0	21
TOTAL	0	97	62	62	221

Table 2D-6.4

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 50

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	2	3
4	0	0	0	1	1
5	0	4	0	7	11
6	0	9	3	7	19
7	0	13	0	5	18
8	0	6	4	7	17
9	0	7	0	8	15
10	0	6	3	0	9
11	0	5	3	1	9
12	0	9	4	2	15
13	0	9	13	0	22
14	0	6	3	0	9
15	0	7	8	0	15
16	0	2	6	0	8
17	0	7	3	0	10
18	0	1	7	0	8
OVER 18	0	2	19	0	20
TOTAL	0	94	75	41	210

Table 2D-6.5

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	2	2
3	0	1	0	2	3
4	0	2	1	2	5
5	0	9	0	12	21
6	0	7	2	8	17
7	0	8	0	12	20
8	0	9	1	6	16
9	0	26	1	7	34
10	0	21	9	2	32
11	0	7	3	2	12
12	0	9	15	1	25
13	0	10	16	0	26
14	0	2	14	0	16
15	0	7	11	0	18
16	0	3	3	0	6
17	0	2	3	0	5
18	0	6	6	0	12
OVER 18	0	1	24	0	25
TOTAL	0	130	109	56	295

Table 2D-6.6

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	1	0	2	3
5	0	9	1	8	18
6	0	6	2	7	15
7	0	10	0	11	21
8	0	20	3	9	32
9	0	19	6	9	34
10	0	12	14	7	33
11	0	10	8	1	19
12	0	20	18	4	42
13	0	27	23	1	51
14	0	13	12	0	25
15	0	8	21	0	29
16	0	2	4	0	6
17	0	2	13	0	15
18	0	14	17	0	31
OVER 18	0	2	17	0	19
TOTAL	0	175	159	59	393

Table 2D-6.7

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 80.

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	1	0	1	2
3	0	1	0	4	5
4	0	2	0	6	8
5	0	3	0	4	7
6	0	7	1	10	18
7	0	15	4	12	31
8	0	19	5	8	32
9	0	25	5	4	34
10	0	28	11	5	44
11	0	18	22	3	43
12	0	18	31	2	51
13	0	44	21	0	65
14	0	23	21	0	44
15	0	35	32	0	67
16	0	4	15	0	19
17	0	18	22	0	40
18	0	9	21	0	30
OVER 18	0	9	5	0	14
TOTAL	0	279	216	59	554

Table 2D-6.8

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	0	0
3	0	1	1	4	6
4	0	2	0	3	5
5	0	10	3	12	25
6	0	13	5	5	23
7	0	28	6	14	48
8	0	27	11	5	43
9	0	38	9	7	54
10	0	36	22	10	68
11	0	11	15	1	27
12	0	29	26	1	56
13	0	32	25	2	59
14	0	8	20	0	28
15	0	23	35	0	58
16	0	11	26	0	37
17	0	9	29	0	38
18	0	10	30	0	40
OVER 18	0	6	15	0	21
TOTAL	0	294	278	65	637

Table 2D-6.9

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE ?

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES.

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	1	1
4	0	5	0	4	9
5	0	3	2	5	10
6	0	16	5	7	28
7	0	26	6	7	39
8	0	25	11	2	38
9	0	23	19	3	45
10	0	36	25	5	66
11	0	20	17	0	37
12	0	16	21	0	37
13	0	22	19	1	41
14	0	9	15	0	24
15	0	16	24	0	40
16	0	1	13	0	14
17	0	1	21	0	22
18	0	2	16	0	18
OVER 18	0	3	12	0	15
TOTAL	0	224	225	37	486

Table 2D-6.10

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	3	3
3	0	3	0	1	4
4	0	3	0	4	7
5	0	12	0	6	18
6	0	19	13	11	43
7	0	20	10	5	35
8	0	34	10	12	56
9	0	42	13	7	62
10	0	40	30	2	72
11	0	16	9	1	26
12	0	12	25	1	38
13	0	14	26	0	40
14	0	10	13	0	23
15	0	5	19	0	24
16	0	4	10	0	14
17	0	2	16	0	18
18	0	3	7	0	10
OVER 18	0	1	5	0	6
TOTAL	0	240	206	53	499

Table 2D-6.11

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	0	0
3	0	3	0	1	4
4	0	2	0	3	5
5	0	7	4	7	18
6	0	12	9	4	25
7	0	27	13	4	44
8	0	28	11	4	43
9	0	19	14	2	35
10	0	28	28	4	60
11	0	14	25	0	39
12	0	11	18	1	30
13	0	14	26	0	40
14	0	10	13	0	23
15	0	11	18	0	29
16	0	3	8	0	11
17	0	0	2	0	2
18	0	2	11	0	13
OVER 18	0	1	8	0	9
TOTAL	0	192	208	31	431

Table 2D-6.12

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	1	0	0	1
5	0	6	4	9	19
6	0	8	2	1	11
7	0	14	9	7	30
8	0	22	8	1	31
9	0	14	18	4	36
10	0	24	9	2	35
11	0	8	11	1	20
12	0	19	17	0	36
13	0	17	21	1	39
14	0	6	13	0	19
15	0	7	5	0	12
16	0	1	5	0	6
17	0	4	4	0	8
18	0	2	5	0	7
OVER 18	0	2	5	0	7
TOTAL	0	155	136	26	317

Table 2D-6.13

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	1	1
3	0	0	0	2	2
4	0	1	0	1	2
5	0	2	2	2	6
6	0	8	1	1	10
7	0	8	1	5	14
8	0	16	12	5	33
9	0	16	10	2	28
10	0	36	13	2	51
11	0	14	7	1	22
12	0	26	15	0	41
13	0	19	15	0	34
14	0	9	9	0	18
15	0	9	5	0	14
16	0	0	10	0	10
17	0	1	2	0	3
18	0	0	6	0	6
OVER 18	0	0	15	0	15
TOTAL	0	165	123	23	311

Table 2D-6.14

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	1	0	0	1
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	1	0	1	2
5	0	10	0	1	11
6	0	6	6	1	13
7	0	4	4	2	10
8	0	10	8	1	19
9	0	18	12	1	31
10	0	23	26	0	49
11	0	13	10	0	23
12	0	14	15	0	29
13	0	23	8	0	31
14	0	12	13	0	25
15	0	9	10	0	19
16	0	1	9	0	10
17	0	0	9	0	9
18	0	0	3	0	3
OVER 18	0	0	3	0	3
TOTAL	0	145	136	7	288

Table 2D-6.15

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	1	1
4	0	1	1	1	3
5	0	4	1	1	6
6	0	2	4	1	7
7	0	2	2	3	7
8	0	10	12	3	25
9	0	7	8	3	18
10	0	9	10	0	19
11	0	8	6	1	15
12	0	12	9	0	21
13	0	13	7	0	20
14	0	4	4	0	8
15	0	4	3	0	7
16	0	2	6	0	8
17	0	0	3	0	3
18	0	1	2	0	3
OVER 18	0	0	3	0	3
TOTAL	0	79	81	14	174

Table 2D-6.16

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	1	0	2	3
4	0	0	0	2	2
5	0	3	1	7	11
6	0	1	0	1	2
7	0	2	1	1	4
8	0	2	7	3	12
9	0	7	5	1	13
10	0	9	9	5	23
11	0	6	6	1	13
12	0	8	8	1	17
13	0	11	5	0	16
14	0	7	4	0	11
15	0	4	3	1	8
16	0	2	3	0	5
17	0	1	1	0	2
18	0	0	0	0	0
OVER 18	0	0	9	0	9
TOTAL	0	64	62	25	151

Table 2D-6.17

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	0	0
2	0	0	0	1	1
3	0	2	1	6	9
4	1	0	0	2	3
5	0	1	1	6	8
6	0	2	0	4	6
7	0	6	1	3	10
8	0	6	2	5	13
9	0	0	4	3	7
10	0	11	5	2	18
11	0	6	0	0	6
12	0	9	3	0	12
13	0	11	5	0	16
14	0	4	3	0	7
15	0	4	3	0	7
16	0	0	3	0	3
17	0	0	0	0	0
18	0	0	1	0	1
OVER 18	0	0	6	1	7
TOTAL	1	62	38	35	136

Table 2D-6.18

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	1	1
3	0	1	0	2	3
4	0	1	0	2	3
5	0	1	1	15	17
6	0	3	0	12	15
7	0	2	5	6	13
8	0	5	7	6	18
9	0	6	5	4	15
10	0	6	4	3	13
11	0	6	1	1	8
12	0	2	2	0	4
13	0	6	0	1	7
14	0	0	0	0	0
15	0	9	4	0	13
16	0	3	1	0	4
17	0	4	2	0	6
18	0	3	2	0	5
OVER 18	0	2	4	0	6
TOTAL	0	60	38	54	152

Table 2D-6.19

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	1	4	5
3	0	0	0	4	4
4	0	1	0	4	5
5	0	6	0	12	18
6	0	3	0	3	6
7	0	5	3	5	13
8	0	3	0	2	5
9	0	3	1	0	4
10	0	2	1	0	3
11	0	2	1	0	3
12	0	4	0	2	6
13	0	3	1	1	5
14	0	1	0	0	1
15	0	5	1	0	6
16	0	1	2	0	3
17	0	5	1	1	7
18	0	1	1	0	2
OVER 18	0	0	4	0	4
TOTAL	0	45	17	39	101

Table 2D-6.20

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	1	1
2	0	0	0	7	7
3	0	1	0	10	11
4	0	2	1	12	15
5	0	11	1	14	26
6	0	5	0	12	17
7	0	4	1	11	16
8	0	4	4	6	14
9	0	1	0	2	3
10	0	2	0	0	2
11	0	1	1	0	2
12	0	4	0	0	4
13	0	3	0	0	3
14	0	1	0	0	1
15	0	2	0	0	2
16	0	0	0	0	0
17	0	0	1	0	1
18	0	5	2	0	7
OVER 18	0	1	1	0	2
TOTAL	0	47	12	77	136

Table 2D-6.21

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	3	3
2	0	1	0	2	3
3	0	1	0	7	8
4	0	0	0	8	8
5	0	9	1	19	29
6	0	4	1	9	14
7	0	3	0	3	6
8	0	7	1	3	11
9	0	2	2	1	5
10	0	6	1	0	7
11	0	0	1	0	1
12	0	1	1	0	2
13	0	2	1	0	3
14	0	0	0	0	0
15	0	2	0	0	2
16	0	1	1	0	2
17	0	1	0	0	1
18	0	3	0	0	3
OVER 18	0	2	1	0	3
TOTAL	0	45	11	55	111

Table 2D-6.22

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	1	0	0	1
2	0	0	0	2	2
3	0	1	1	3	5
4	0	1	1	5	7
5	0	5	1	13	19
6	0	1	2	15	18
7	0	5	3	9	17
8	0	4	2	4	10
9	0	2	0	1	3
10	0	3	0	3	6
11	0	1	2	0	3
12	0	1	1	1	3
13	0	1	2	0	3
14	0	2	0	0	2
15	0	3	1	0	4
16	0	1	0	0	1
17	0	2	1	0	3
18	0	1	2	0	3
OVER 18	0	3	1	0	4
TOTAL	0	38	20	56	114

Table 2D-6.23

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	2	2
2	0	0	0	5	5
3	0	0	0	10	10
4	0	2	0	8	10
5	0	4	1	18	23
6	0	2	3	9	14
7	0	3	4	11	18
8	0	2	2	1	5
9	0	0	2	0	2
10	0	4	1	1	6
11	0	2	1	1	4
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	0	19	14	66	99

Table 2D-6.24

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	2	2
3	0	1	0	2	3
4	0	1	1	6	8
5	0	0	0	3	3
6	0	1	0	6	7
7	0	1	0	1	2
8	0	4	1	2	7
9	0	0	1	0	1
10	0	0	2	0	2
11	0	0	1	0	1
12	0	1	0	0	1
13	0	0	0	0	0
14	0	1	0	0	1
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	0	10	6	23	39

Table 2D-6.25

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SHE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	1	1
1	0	0	0	3	3
2	0	0	0	7	7
3	0	2	1	4	7
4	0	0	0	8	8
5	0	2	0	6	8
6	0	0	0	6	6
7	0	1	0	1	2
8	0	0	0	3	3
9	0	0	0	3	3
10	0	0	0	1	1
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	0	5	1	43	49

Table 2D-6.26

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	2	2
1	0	0	0	3	3
2	0	0	0	12	12
3	0	1	0	6	7
4	0	0	0	12	12
5	0	2	0	13	15
6	0	1	0	4	5
7	0	0	2	1	3
8	0	1	0	6	7
9	0	1	1	3	5
10	0	3	0	3	6
11	0	0	0	0	0
12	0	2	0	0	2
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	1	0	1
17	0	0	0	0	0
18	0	0	0	0	0
OVER 18	0	0	0	0	0
TOTAL	0	11	4	65	80

Table 2D-6.27

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	0	0	1	1
1	0	0	0	0	0
2	0	0	0	2	2
3	0	0	1	7	8
4	0	0	1	7	8
5	0	2	1	13	16
6	0	1	0	13	14
7	0	2	0	7	9
8	0	3	0	5	8
9	0	0	3	2	5
10	0	2	2	3	7
11	0	0	1	0	1
12	0	1	4	0	5
13	0	0	1	0	1
14	0	0	1	0	1
15	0	1	1	0	2
16	0	1	0	0	1
17	0	1	1	0	2
18	0	0	1	0	1
OVER 18	0	0	0	0	0
TOTAL	0	14	18	60	92

Table 2D-6.28

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	---------STABILITY CLASSIFICATION-------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	2	2
1	0	0	0	0	0
2	0	1	0	6	7
3	0	0	0	7	7
4	0	0	0	7	7
5	1	3	2	15	21
6	0	1	4	28	33
7	0	1	0	13	14
8	0	1	2	1	4
9	0	0	1	1	2
10	0	3	1	1	5
11	0	0	1	0	1
12	0	4	0	0	4
13	0	3	3	0	6
14	0	2	1	0	3
15	0	1	0	0	1
16	0	3	1	0	4
17	0	1	3	0	4
18	0	0	1	0	1
OVER 18	0	0	4	0	4
TOTAL	1	24	24	81	130

Table 2D-6.29

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	---------STABILITY CLASSIFICATION-------- GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	4	4
2	0	0	0	4	4
3	0	0	0	12	12
4	0	3	0	6	9
5	0	3	0	19	22
6	0	5	0	10	15
7	0	4	4	10	18
8	0	2	0	8	10
9	0	2	0	3	5
10	0	3	2	0	5
11	0	2	0	0	2
12	0	1	0	0	1
13	0	7	1	0	8
14	0	1	1	0	2
15	0	0	1	0	1
16	0	1	2	0	3
17	0	1	0	0	1
18	0	0	1	0	1
OVER 18	0	0	1	0	1
TOTAL	0	35	13	76	124

Table 2D-6.30

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	1	0	0	1
2	0	1	0	4	5
3	0	1	0	6	7
4	0	2	0	10	12
5	0	3	0	22	25
6	0	3	0	10	13
7	0	2	1	7	10
8	0	2	1	2	5
9	0	2	0	1	3
10	0	1	1	1	3
11	0	2	1	0	3
12	0	3	0	0	3
13	0	2	1	0	3
14	0	1	1	0	2
15	0	1	2	0	3
16	0	2	0	0	2
17	0	0	2	0	2
18	0	0	2	0	2
OVER 18	0	0	0	0	0
TOTAL	0	29	12	63	104

Table 2D-6.31

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SITE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	1	1
2	0	0	0	0	0
3	0	1	0	9	10
4	0	1	1	12	14
5	0	4	0	18	22
6	0	2	1	14	17
7	0	2	0	19	21
8	0	3	7	11	21
9	0	2	2	1	5
10	0	3	9	6	18
11	0	0	3	1	4
12	0	2	5	0	7
13	0	3	4	0	7
14	0	1	6	0	7
15	0	1	2	0	3
16	0	1	1	0	2
17	0	1	0	0	1
18	0	0	0	0	0
OVER 18	0	3	0	0	3
TOTAL	0	30	41	92	163

Table 2D-6.32

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	3	0	5	8
3	0	1	0	11	12
4	0	3	2	15	20
5	0	2	0	28	30
6	0	4	0	28	32
7	0	10	2	21	33
8	0	12	5	18	35
9	0	9	9	19	37
10	0	3	10	10	23
11	0	3	4	4	11
12	0	5	9	7	21
13	0	6	12	5	23
14	0	1	5	0	6
15	0	3	6	1	10
16	0	1	8	0	9
17	0	3	0	0	3
18	0	5	2	0	7
OVER 10	0	5	1	0	6
TOTAL	0	79	75	172	326

Table 2D-6.33

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	4	4
4	0	3	0	4	7
5	0	5	0	13	18
6	0	2	0	17	19
7	0	4	1	16	21
8	0	5	5	9	19
9	0	3	4	7	14
10	0	8	12	10	30
11	0	3	7	1	11
12	0	6	12	2	20
13	0	12	12	1	25
14	0	2	5	0	7
15	0	1	7	0	8
16	0	2	2	0	4
17	0	2	3	0	5
18	0	4	3	0	7
OVER 10	0	1	2	0	3
TOTAL	0	63	75	84	222

Table 2D-6.34

TURKEY POINT DATA

YEAR: 1970 | TABLE 1: 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	2	2
3	0	2	1	5	8
4	0	1	0	4	5
5	0	3	0	7	10
6	0	5	0	11	16
7	0	7	1	7	15
8	0	11	4	13	28
9	0	7	2	6	15
10	0	9	5	10	24
11	0	4	3	3	10
12	0	4	5	4	13
13	0	2	7	2	11
14	0	5	2	0	7
15	0	5	2	0	7
16	0	0	0	0	0
17	0	1	4	0	5
18	0	1	2	0	3
OVER 18	0	0	2	0	2
TOTAL	0	67	40	74	181

Table 2D-6.35

TURKEY POINT DATA

YEAR: 1970 | TABLE 1: 30 FT. WIND SPEED VS. STABILITY | SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	STABILITY CLASSIFICATION GUST 1	GUST 2	GUST 3	GUST 4	TOTAL
0	0	0	0	0	0
1	0	0	0	0	0
2	0	1	0	5	6
3	0	2	0	5	7
4	0	3	0	12	15
5	0	8	0	5	13
6	0	5	0	6	11
7	0	17	0	6	23
8	0	5	1	4	10
9	0	8	1	2	11
10	0	5	0	2	7
11	0	2	1	0	3
12	0	5	1	0	6
13	0	5	3	1	9
14	0	3	1	0	4
15	0	2	3	0	5
16	0	1	4	0	5
17	0	2	1	0	3
18	0	1	3	0	4
OVER 18	0	0	1	1	2
TOTAL	0	75	20	49	144

Table 2D-6.36

TURKEY POINT DATA

YEAR: 1970 TABLE 1: 30 FT. WIND SPEED VS. STABILITY SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	--------STABILITY CLASSIFICATION-------				TOTAL
	GUST 1	GUST 2	GUST 3	GUST 4	
0	0	1	0	16	17
1	0	2	0	21	23
2	0	8	1	87	96
3	0	31	7	149	187
4	1	54	10	183	248
5	1	176	28	360	565
6	0	194	65	292	551
7	0	280	87	267	634
8	0	334	148	196	678
9	0	331	161	136	628
10	0	412	266	121	799
11	0	198	172	32	402
12	0	279	271	31	581
13	0	336	283	19	638
14	0	156	188	0	344
15	0	200	233	4	437
16	0	60	159	0	219
17	0	74	153	1	228
18	0	81	163	0	244
OVER 18	0	57	185	2	244
TOTAL	2	3264	2580	1917	7763

Table 2D-6.37

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 10

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	1	0	0	1
3	0	1	0	0	0	0	0	1
4	0	1	0	0	0	0	1	2
5	0	1	0	3	1	0	0	5
6	0	2	2	1	0	0	0	5
7	0	1	2	4	0	1	0	8
8	0	4	2	4	1	0	1	12
9	0	2	0	1	1	0	0	4
10	0	2	1	1	0	0	0	4
11	0	2	0	1	0	0	0	3
12	0	4	2	3	0	0	0	9
13	0	0	0	0	0	0	0	0
14	0	1	0	0	0	0	0	1
15	0	1	0	0	0	0	0	1
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	23	9	18	4	1	2	57

Table 2D-7.1

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 20

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	1	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0	2
3	0	1	0	0	0	1	2	[illegible]
4	0	0	0	2	1	0	0	3
5	0	2	0	3	0	0	0	5
6	1	6	8	3	0	0	0	1[illegible]
7	0	7	2	9	0	0	0	18
8	0	1	1	2	3	0	0	7
9	0	1	3	2	0	0	0	6
10	0	3	3	6	0	0	0	1[illegible]
11	0	0	1	4	0	0	0	5
12	0	3	1	0	0	0	0	4
13	0	3	2	0	0	0	0	5
14	0	2	1	0	0	0	0	3
15	0	3	0	0	0	0	0	3
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	[illegible]
18 & OVER	0	8	0	0	0	0	0	[illegible]
TOTAL	1	40	23	33	5	1	2	[illegible]

Table 2D-7.2

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 30

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	1
2	0	0	0	2	3	0	0	5
3	0	0	1	0	1	2	0	4
4	0	1	1	4	1	0	0	7
5	0	6	4	6	0	0	0	16
6	0	1	2	3	2	0	0	8
7	0	4	5	3	0	0	0	12
8	0	5	5	1	1	0	0	12
9	0	3	1	3	1	0	0	8
10	0	5	2	6	0	0	0	13
11	0	3	2	1	0	0	0	6
12	0	1	3	2	0	0	0	6
13	0	5	3	1	0	0	0	9
14	0	1	1	0	0	0	0	2
15	0	3	3	1	0	0	0	7
16	0	0	7	1	0	0	0	8
17	0	0	2	1	0	0	0	3
18 & OVER	0	4	3	0	0	0	0	7
TOTAL	0	42	45	35	10	2	0	134

Table 2D-7.3

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 40

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	1	2	1	0	0	4
4	0	2	3	1	1	0	0	7
5	0	3	3	5	4	0	0	15
6	0	2	5	4	0	0	0	11
7	0	2	5	7	0	0	0	14
8	0	8	1	7	1	0	0	17
9	0	8	4	12	2	0	0	26
10	0	5	5	9	2	0	1	22
11	0	2	1	6	0	0	0	9
12	0	3	6	1	0	0	0	10
13	0	3	2	5	0	0	0	10
14	0	8	3	3	0	0	0	14
15	0	6	4	2	0	0	0	12
16	0	3	4	1	0	0	0	8
17	0	2	2	2	0	0	0	6
18 & OVER	0	9	14	2	0	0	0	25
TOTAL	0	66	63	69	11	0	1	210

Table 2D-7.4

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 50

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	1
3	0	0	0	2	1	0	0	3
4	0	0	0	1	0	0	0	1
5	0	1	1	2	7	0	0	11
6	0	7	5	5	1	0	0	18
7	0	6	4	6	3	0	0	19
8	0	3	6	4	2	2	0	17
9	0	3	4	4	4	0	0	15
10	0	4	5	0	0	0	0	9
11	0	5	1	2	1	0	0	9
12	0	8	4	3	0	0	0	15
13	0	5	10	7	0	0	0	22
14	0	5	4	0	0	0	0	9
15	0	10	4	1	0	0	0	15
16	0	4	2	2	0	0	0	8
17	0	5	3	2	0	0	0	10
18 & OVER	0	4	19	2	0	0	0	25
TOTAL	0	70	72	44	19	2	0	207

Table 2D-7.5

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 60

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	1	0	0	1	0	0	2
3	0	1	0	2	0	0	0	3
4	0	0	2	2	0	1	0	5
5	0	5	4	8	4	0	0	21
6	0	2	5	5	4	0	0	16
7	0	4	3	11	2	0	0	20
8	0	3	6	5	2	0	0	16
9	0	18	6	6	2	0	0	32
10	0	13	9	10	0	0	0	32
11	0	4	5	3	0	0	0	12
12	0	8	10	8	0	0	0	26
13	0	9	11	6	0	0	0	26
14	0	2	8	6	0	0	0	16
15	0	7	5	6	0	0	0	18
16	0	2	3	1	0	0	0	6
17	0	2	3	0	0	0	0	5
18 & OVER	0	8	20	3	0	0	0	31
TOTAL	0	09	100	62	15	1	0	207

Table 2D-7.6

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 70

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	1	2	0	0	0	3
5	0	4	6	5	3	0	0	18
6	0	4	0	6	5	0	0	15
7	0	4	1	8	8	0	0	21
8	0	10	8	12	2	0	0	32
9	0	9	11	12	0	0	0	32
10	0	8	14	11	0	0	0	33
11	0	1	9	9	0	0	0	19
12	0	10	19	13	0	0	0	42
13	0	22	21	13	0	0	0	56
14	0	12	9	6	0	0	0	27
15	0	8	13	8	0	0	0	29
16	0	2	2	2	0	0	0	6
17	0	2	8	5	0	0	0	15
18 & OVER	0	21	17	12	0	0	0	50
TOTAL	0	117	139	124	18	0	0	398

Table 2D-7.7

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 80

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0	2
3	0	1	3	0	1	0	0	5
4	0	1	2	5	0	0	0	8
5	0	1	2	3	1	0	0	7
6	0	2	8	8	2	0	0	20
7	0	9	7	9	6	1	0	32
8	0	9	11	11	2	0	0	33
9	0	16	12	3	3	0	0	34
10	0	18	14	12	1	0	0	45
11	0	13	20	11	1	0	0	45
12	0	14	20	18	0	0	0	52
13	0	35	21	11	0	0	0	67
14	0	19	14	11	0	0	0	44
15	0	35	18	14	0	0	0	67
16	0	3	11	5	0	0	0	19
17	0	16	15	9	0	0	0	40
18 & OVER	0	18	21	5	0	0	0	44
TOTAL	0	210	200	136	17	1	0	564

Table 2D-7.8

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 90

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	1	2	2	1	0	0	6
4	0	0	4	1	0	0	0	5
5	1	4	13	6	2	0	0	26
6	0	8	6	6	2	1	0	23
7	1	17	14	14	3	1	0	50
8	0	14	16	12	2	0	0	44
9	0	25	17	11	2	1	0	56
10	0	25	24	18	2	0	0	69
11	0	10	12	4	1	0	0	27
12	0	22	20	13	0	0	0	55
13	0	22	25	11	1	0	0	59
14	0	6	16	6	0	0	0	28
15	0	20	28	10	0	0	0	58
16	0	10	21	6	0	0	0	37
17	0	5	24	9	0	0	0	38
18 & OVER	0	19	39	3	0	0	0	61
TOTAL	2	208	281	133	16	3	0	643

Table 2D-7.9

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 100

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	1	0	0	2
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	1	0	0	0	1
4	0	2	4	1	2	0	0	9
5	0	2	3	3	1	0	0	9
6	0	9	10	7	0	0	0	26
7	0	17	11	9	2	0	0	39
8	0	15	18	8	1	0	0	42
9	0	15	21	12	1	0	0	49
10	0	23	31	12	2	0	0	68
11	0	17	16	5	0	0	0	38
12	0	16	10	10	0	0	0	36
13	0	13	19	7	2	0	0	41
14	0	9	11	4	0	0	0	24
15	0	14	20	6	0	0	0	40
16	0	2	11	1	0	0	0	[illegible]
17	0	1	10	3	0	0	0	[illegible]
18 & OVER	0	6	24	3	0	0	0	[illegible]
TOTAL	0	161	227	93	12	0	0	493

Table 2D-7.10

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 110

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	0	1	1	0	3
3	0	1	2	1	0	0	0	4
4	0	0	3	4	0	0	0	7
5	0	2	11	4	0	1	0	18
6	0	4	19	12	3	0	0	39
7	0	9	19	8	0	0	0	36
8	0	20	26	10	1	0	0	57
9	0	28	23	14	1	0	0	66
10	0	29	33	9	3	0	0	74
11	0	12	9	4	1	0	0	26
12	0	11	19	7	0	0	0	37
13	0	19	15	6	0	0	0	40
14	0	10	10	3	0	0	0	23
15	0	4	13	7	0	0	0	24
16	0	4	6	4	0	0	0	14
17	0	3	13	2	0	0	0	18
18 & OVER	0	6	9	1	0	0	0	16
TOTAL	0	162	231	96	10	2	0	501

Table 2D-7.11

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SITE CODE 2

WIND FROM SECTOR: 120

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	3	1	0	0	0	4
4	0	0	2	2	1	0	0	5
5	0	0	10	5	3	0	0	18
6	0	6	7	3	3	0	0	19
7	0	12	25	6	1	0	0	44
8	0	10	22	9	2	0	0	43
9	0	11	18	5	2	0	0	36
10	0	18	20	13	0	0	0	59
11	0	8	26	5	0	0	0	39
12	0	9	15	6	0	0	0	30
13	0	15	19	6	0	0	0	40
14	0	11	9	3	0	0	0	23
15	0	11	15	3	0	0	0	29
16	0	3	6	2	0	0	0	11
17	0	0	1	1	0	0	0	2
18 & OVER	0	1	16	5	0	0	0	22
TOTAL	0	115	220	76	12	0	0	425

Table 2D-7.12

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 130

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	1	0	0	1
4	0	0	1	0	0	0	0	1
5	0	1	7	10	1	0	0	19
6	0	2	3	5	0	0	0	10
7	0	7	14	10	0	0	0	31
8	0	10	16	5	0	0	0	31
9	0	6	17	10	3	0	0	36
10	0	13	16	4	0	0	0	33
11	0	5	11	3	1	0	0	20
12	0	17	17	2	0	0	0	36
13	0	13	22	4	0	0	0	39
14	0	5	10	4	0	0	0	19
15	0	4	8	0	0	0	0	12
16	0	1	4	1	0	0	0	6
17	0	4	4	0	0	0	0	8
18 & OVER	0	5	6	3	0	0	0	14
TOTAL	0	93	156	61	6	0	0	316

Table 2D-7.13

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 140

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	0	1
2	0	0	0	1	0	0	0	1
3	0	0	1	1	1	0	0	3
4	0	0	1	1	0	0	0	2
5	0	0	4	3	0	0	0	7
6	0	2	7	2	0	0	0	11
7	0	2	6	6	0	0	0	14
8	0	12	14	6	0	1	0	33
9	0	10	9	9	0	0	0	28
10	0	23	18	4	0	0	0	45
11	0	10	11	0	1	0	0	22
12	0	23	16	2	0	0	0	41
13	0	18	12	3	1	0	0	34
14	0	7	9	1	0	0	0	17
15	0	8	4	2	0	0	0	14
16	0	0	6	4	0	0	0	10
17	0	1	2	0	0	0	0	3
18 & OVER	0	7	9	5	0	0	0	21
TOTAL	0	123	129	50	3	2	0	307

Table 2D-7.14

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 150

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	1	0	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	1	1	0	0	0	2
5	0	1	8	3	0	0	0	12
6	0	4	4	1	0	2	0	11
7	0	1	7	2	0	0	0	10
8	0	7	7	5	0	0	0	19
9	0	12	15	4	0	0	0	31
10	0	16	25	7	0	0	0	48
11	0	11	11	1	0	0	0	23
12	0	11	15	2	1	0	0	29
13	0	22	5	4	0	0	0	31
14	0	11	5	7	0	0	0	23
15	0	8	8	3	0	0	0	19
16	0	1	7	2	0	0	0	10
17	0	1	5	3	0	0	0	9
18 & OVER	0	2	2	2	0	0	0	6
TOTAL	0	108	126	47	1	2	0	284

Table 2D-7.15

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 160

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	1
4	0	0	2	1	0	0	0	3
5	0	0	4	1	1	0	0	6
6	0	0	4	3	0	0	0	7
7	0	0	4	3	0	0	0	7
8	0	4	13	8	0	0	0	25
9	0	5	6	7	0	0	0	18
10	0	5	12	2	0	0	0	19
11	0	8	5	2	0	0	0	15
12	0	11	8	2	0	0	0	21
13	0	11	7	2	0	0	0	20
14	0	5	1	2	0	0	0	8
15	0	5	2	0	0	0	0	7
16	0	2	5	1	0	0	0	8
17	0	0	3	0	0	0	0	3
18 & OVER	0	0	4	2	0	0	0	6
TOTAL	0	56	81	36	1	0	0	174

Table 2D-7.16

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 170

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	1	2	0	0	0	3
4	0	0	0	2	0	0	0	2
5	0	0	2	8	1	0	0	11
6	0	0	1	1	0	0	0	2
7	0	1	2	1	1	0	0	5
8	0	0	8	4	0	0	0	12
9	0	3	7	3	0	0	0	13
10	1	6	6	8	0	0	0	21
11	0	3	5	5	0	0	0	13
12	0	5	6	7	0	0	0	18
13	0	11	3	2	0	0	0	16
14	0	8	1	2	0	0	0	11
15	0	4	1	3	0	0	0	8
16	0	2	1	2	0	0	0	5
17	0	1	1	0	0	0	0	2
18 & OVE	0	0	3	6	0	0	0	9
TOTAL	1	44	48	56	2	0	0	151

Table 2D-7.17

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 180

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	0	0	0	0	0
2	0	0	0	2	0	0	0	2
3	0	1	3	4	1	0	0	9
4	0	1	1	1	0	0	0	3
5	0	0	3	5	0	0	0	8
6	0	1	1	4	0	0	0	6
7	0	3	2	6	0	0	0	11
8	0	2	3	8	0	0	0	13
9	0	0	2	5	0	0	0	7
10	0	9	3	5	0	0	0	17
11	0	5	1	0	0	0	0	6
12	0	5	5	3	0	0	0	13
13	0	10	5	1	0	0	0	16
14	0	4	2	1	0	0	0	7
15	0	3	2	2	0	0	0	7
16	0	0	2	1	0	0	0	3
17	0	0	0	0	0	0	0	0
18 & OVER	0	2	3	3	0	0	0	[illegible]
TOTAL	0	46	38	53	1	0	0	13[illegible]

Table 2D-7.18

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 190

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	1	1
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	1	0	1
3	0	0	0	1	2	0	0	3
4	0	0	1	1	1	0	0	3
5	0	0	4	10	4	0	0	18
6	0	1	4	10	0	0	0	15
7	0	1	3	9	0	0	0	13
8	0	0	7	10	1	0	0	18
9	0	1	6	8	0	0	0	15
10	0	2	4	7	0	0	0	13
11	0	4	3	1	0	0	0	8
12	0	1	2	1	0	0	0	4
13	0	5	1	1	0	0	0	7
14	0	0	0	0	0	0	0	0
15	0	8	5	0	0	0	0	13
16	0	4	0	0	0	0	0	4
17	0	5	0	1	0	0	0	6
18 & OVER	0	4	6	1	0	0	0	11
TOTAL	0	36	46	61	8	1	1	153

Table 2D-7.19

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 200

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	1
2	0	0	0	5	0	0	0	5
3	0	0	0	3	1	0	0	4
4	0	0	1	4	0	0	0	5
5	0	5	5	6	2	0	0	18
6	0	1	2	3	0	0	0	6
7	0	2	6	3	2	0	0	13
8	0	1	2	2	0	0	0	5
9	0	2	2	0	0	0	0	4
10	0	2	1	0	0	0	0	3
11	0	2	0	1	0	0	0	3
12	0	1	3	2	0	0	0	6
13	0	1	2	2	0	0	0	5
14	0	1	0	0	0	0	0	1
15	0	4	2	0	0	0	0	6
16	0	2	1	0	0	0	0	3
17	0	5	0	2	0	0	0	7
18 & OVER	0	4	1	1	0	0	0	6
TOTAL	0	33	28	34	6	0	0	101

Table 2D-7.20

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 210

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	1	0	0	0	1
2	0	0	1	6	0	0	0	7
3	0	1	2	6	2	0	0	11
4	0	1	3	11	1	0	0	16
5	0	3	5	16	2	0	0	26
6	0	2	2	6	7	0	0	17
7	0	1	3	11	1	0	0	16
8	0	1	7	2	4	0	0	14
9	0	0	1	1	1	0	0	3
10	0	2	0	0	0	0	0	2
11	0	0	1	1	0	0	0	2
12	0	2	1	1	0	0	0	4
13	0	2	1	0	0	0	0	3
14	0	1	0	0	0	0	0	1
15	0	2	0	0	0	0	0	2
16	0	0	0	0	0	0	0	0
17	0	0	0	1	0	0	0	1
18 & OVER	0	6	2	1	0	0	0	9
TOTAL	0	24	29	66	18	0	0	137

Table 2D-7.21

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 220

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	3	0	0	3
2	0	0	0	2	1	0	0	3
3	0	0	3	5	0	0	0	8
4	0	0	0	6	2	0	0	8
5	0	2	5	19	3	0	0	29
6	0	2	3	5	4	0	0	14
7	0	0	3	3	0	0	0	6
8	0	3	4	4	0	0	0	11
9	0	1	2	2	0	0	0	5
10	0	5	1	1	0	0	0	7
11	0	0	1	0	0	0	0	1
12	0	1	1	0	0	0	0	2
13	0	1	2	0	0	0	0	3
14	0	0	0	0	0	0	0	0
15	0	2	0	0	0	0	0	2
16	0	2	0	0	0	0	0	2
17	0	0	1	0	0	0	0	1
18 & OVER	0	5	1	0	0	0	0	6
TOTAL	0	24	27	47	13	0	0	111

Table 2D-7.22

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 230

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0	1
2	0	0	1	1	0	1	0	3
3	0	1	1	2	1	0	0	5
4	0	1	2	4	0	0	0	7
5	0	2	3	14	0	0	0	19
6	0	0	1	11	4	2	0	18
7	0	1	3	9	3	1	0	17
8	0	2	4	2	2	0	0	10
9	0	1	1	1	0	0	0	3
10	0	0	1	3	0	0	0	4
11	0	1	2	0	0	0	0	3
12	0	1	0	2	0	0	0	3
13	0	1	2	0	0	0	0	3
14	0	2	0	0	0	0	0	2
15	0	1	3	0	0	0	0	4
16	0	1	0	0	0	0	0	1
17	0	3	0	0	0	0	0	3
18 & OVER	0	7	0	0	0	0	0	7
TOTAL	0	25	25	49	10	4	0	113

Table 2D-7.23

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 240

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	1	1	0	0	2
2	0	0	0	1	4	0	0	5
3	0	0	0	8	5	0	0	13
4	0	1	0	9	2	0	0	12
5	0	3	2	12	5	1	0	23
6	0	0	2	8	4	0	0	14
7	0	1	3	11	3	0	0	18
8	0	1	2	1	0	0	1	5
9	0	0	1	1	0	0	0	2
10	0	0	4	0	0	0	0	4
11	0	0	0	4	0	0	0	4
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	[illegible]
TOTAL	0	6	14	56	24	1	1	102

Table 2D-7.24

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 250

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	1
2	0	0	0	2	0	0	0	2
3	0	0	0	1	2	0	0	3
4	0	0	1	5	2	0	0	8
5	0	0	1	2	1	0	0	4
6	0	0	0	6	1	0	0	7
7	0	0	0	2	0	0	0	2
8	0	2	2	3	0	0	0	7
9	0	0	0	1	0	0	0	1
10	0	0	2	0	0	0	0	2
11	0	0	1	0	0	0	0	1
12	0	1	0	0	0	0	0	1
13	0	0	0	0	0	0	0	0
14	0	0	1	0	0	0	0	1
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	3	8	22	7	0	0	40

Table 2D-7.25

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 260

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	1	2	0	0	3
2	0	0	0	6	1	1	0	8
3	0	0	0	6	1	0	0	7
4	0	0	0	7	2	0	0	9
5	0	0	2	5	1	0	0	8
6	0	0	0	3	2	1	0	6
7	0	1	0	1	0	0	0	2
8	0	0	1	0	3	0	0	4
9	0	0	0	2	1	0	0	3
10	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	1	3	32	13	2	0	51

Table 2D-7.26

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 270

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	1	0	0	1	0	0	2
1	0	0	0	1	2	0	0	3
2	0	0	0	10	3	0	0	13
3	0	1	0	6	2	0	0	9
4	0	0	0	8	3	1	0	12
5	0	0	2	8	4	1	0	15
6	0	1	0	3	2	0	0	6
7	0	0	0	4	0	0	0	4
8	0	1	1	4	1	0	0	7
9	0	1	0	4	0	0	0	5
10	0	3	0	2	0	0	0	5
11	0	0	0	0	0	0	0	0
12	0	1	1	0	0	0	0	2
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	1	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0
18 & OVER	0	0	0	0	0	0	0	0
TOTAL	0	10	4	50	18	2	0	84

Table 2D-7.27

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 280

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	1	0	0	0	1
1	0	0	0	0	0	0	0	0
2	0	0	0	1	1	0	0	2
3	0	0	1	6	1	0	0	8
4	0	0	0	5	3	0	0	8
5	0	0	1	16	1	0	0	18
6	0	1	0	10	3	0	0	14
7	0	0	2	6	2	0	0	10
8	0	1	2	5	2	0	0	10
9	0	1	2	2	0	0	0	5
10	0	3	2	1	1	0	0	7
11	0	0	1	0	0	0	0	1
12	0	2	3	0	0	0	0	5
13	0	1	0	0	0	0	0	1
14	0	0	0	1	0	0	0	1
15	0	1	0	1	0	0	0	2
16	0	1	0	0	0	0	0	1
17	0	1	1	0	0	0	0	2
18 & OVER	0	1	0	0	0	0	0	1
TOTAL	0	13	15	55	14	0	0	97

Table 2D-7.28

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 290

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	2	0	0	0	2
1	0	0	0	0	1	0	0	1
2	0	1	0	6	0	0	0	7
3	0	0	0	7	0	0	0	7
4	0	0	0	6	2	0	0	8
5	0	0	4	14	4	1	0	23
6	0	0	1	16	14	2	0	33
7	0	1	0	4	6	3	0	14
8	0	1	1	1	1	0	0	4
9	0	0	1	0	1	0	0	2
10	0	2	1	2	0	0	0	5
11	0	0	0	1	0	0	0	1
12	0	3	1	0	0	0	0	4
13	0	3	3	0	0	0	0	6
14	0	2	1	0	0	0	0	3
15	0	1	0	0	0	0	0	1
16	0	3	1	0	0	0	0	4
17	0	3	0	1	0	0	0	4
18 & OVER	0	5	0	0	0	0	0	5
TOTAL	0	25	14	60	29	6	0	134

Table 2D-7.29

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 300

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	3	0	0	1	4
2	0	0	0	2	2	0	0	4
3	0	0	0	6	7	0	0	13
4	0	1	2	6	0	1	0	10
5	0	2	2	13	5	0	0	22
6	0	2	2	6	7	0	0	17
7	0	2	2	6	7	1	0	18
8	0	1	2	4	3	0	0	10
9	0	0	1	4	0	0	0	5
10	0	2	3	0	0	0	0	5
11	0	2	0	0	0	0	0	2
12	0	1	0	0	0	0	0	1
13	1	5	2	0	0	0	0	8
14	0	1	1	0	0	0	0	2
15	0	1	0	0	0	0	0	1
16	0	2	1	0	0	0	0	3
17	0	1	0	0	0	0	0	1
18 & OVER	0	2	0	0	0	0	0	2
TOTAL	1	25	18	50	31	2	1	128

Table 2D-7.30

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNF CODE 2

WIND FROM SECTOR: 310

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	1	0	0	0	0	1
2	0	0	1	3	1	0	0	5
3	0	0	1	4	2	0	0	7
4	0	1	0	9	1	1	0	12
5	0	0	1	14	7	2	1	25
6	0	0	2	4	4	2	1	13
7	0	1	2	3	4	0	0	10
8	0	1	1	2	1	0	0	5
9	0	1	2	0	0	0	0	3
10	0	0	3	1	0	0	0	4
11	0	2	1	0	0	0	0	3
12	0	2	1	0	0	0	0	3
13	0	2	1	0	0	0	0	3
14	0	1	1	0	0	0	0	2
15	0	2	1	0	0	0	0	3
16	0	2	0	0	0	0	0	2
17	0	2	0	0	0	0	0	2
18 & OVER	0	1	1	0	0	0	0	2
TOTAL	0	18	20	40	20	5	2	105

Table 2D-7.31

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 320

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
	TEMPERATURE DIFFERENCE (232'-32')							
0	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	1
2	0	0	0	0	0	0	0	0
3	0	1	0	4	4	2	0	11
4	0	0	1	7	6	0	0	14
5	0	0	1	6	8	1	3	19
6	0	0	2	13	1	1	1	18
7	0	0	3	10	5	2	1	21
8	0	3	7	6	4	1	0	21
9	0	1	1	2	1	0	0	5
10	0	2	3	9	4	0	0	18
11	0	0	1	2	0	1	0	4
12	0	2	2	3	0	0	0	7
13	0	4	3	2	0	0	0	9
14	0	3	3	1	0	0	0	7
15	0	1	3	0	0	0	0	4
16	0	2	0	0	0	0	0	2
17	0	1	0	0	0	0	0	1
18 & OVER	0	3	0	0	0	0	0	3
TOTAL	0	23	30	65	34	8	5	165

Table 2D-7.32

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 330

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	3	2	3	0	0	8
3	0	1	0	4	3	4	0	12
4	0	2	1	4	11	2	0	20
5	0	1	0	11	11	5	0	28
6	0	1	0	10	9	10	2	32
7	0	2	4	11	13	3	0	33
8	0	0	10	18	5	2	0	35
9	0	3	7	24	1	2	0	37
10	0	2	6	13	2	0	0	23
11	0	1	1	8	1	0	0	11
12	0	4	6	10	0	1	0	21
13	0	8	5	10	0	0	0	23
14	0	2	5	0	0	0	0	7
15	0	5	4	1	0	0	0	10
16	0	2	6	1	0	0	0	9
17	0	2	0	1	0	0	0	3
18 & OVER	0	9	3	1	0	0	0	13
TOTAL	0	45	61	129	59	29	2	325

Table 2D-7.33

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 340

NUMBER OF HOURLY OCCURRENCES

SPEED MPH	TEMPERATURE DIFFERENCE (232'-32') -6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	2	1	0	1	4
4	0	0	0	2	3	2	0	7
5	0	2	2	4	5	3	2	18
6	0	1	0	6	10	0	2	19
7	0	0	1	9	2	5	3	20
8	0	1	3	11	3	0	1	19
9	0	0	2	9	3	0	0	14
10	0	4	5	20	1	0	0	30
11	0	2	3	6	0	0	0	11
12	0	6	6	7	1	0	0	20
13	0	9	12	4	0	0	0	25
14	0	2	6	0	0	0	0	8
15	0	1	5	2	0	0	0	8
16	0	2	1	1	0	0	0	4
17	0	2	3	0	0	0	0	5
18 & OVER	0	7	3	0	0	0	0	1[illegible]
TOTAL	0	39	52	83	29	10	9	222

Table 2D-7.34

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 350

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	0	2	0	0	0	2
3	0	1	0	4	1	0	1	7
4	0	0	0	3	0	2	0	5
5	0	1	1	1	2	2	3	10
6	0	0	1	13	1	1	0	16
7	0	2	2	6	3	1	0	14
8	0	6	8	11	3	0	0	28
9	0	4	2	7	2	0	0	15
10	0	8	2	15	0	0	0	25
11	0	4	0	6	0	0	0	10
12	0	4	3	6	0	0	0	13
13	0	3	1	6	1	0	0	11
14	0	4	1	2	0	0	0	7
15	0	5	2	0	0	0	0	7
16	0	0	0	0	0	0	0	0
17	0	4	2	0	0	0	0	6
18 & OVER	0	2	3	0	0	0	0	5
TOTAL	0	48	28	82	13	6	4	181

Table 2D-7.35

TURKEY POINT DATA

YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM SECTOR: 360

NUMBER OF HOURLY OCCURRENCES

	TEMPERATURE DIFFERENCE (232'-32')							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0
2	0	0	1	3	2	0	0	6
3	0	0	1	2	2	2	0	7
4	0	1	0	3	5	4	2	15
5	0	3	1	5	3	1	0	13
6	0	5	0	3	3	0	1	12
7	0	7	4	5	5	0	0	21
8	0	4	2	4	0	0	0	10
9	0	5	2	4	0	0	0	11
10	0	3	0	4	0	0	0	7
11	0	2	1	0	0	0	0	3
12	0	5	0	1	0	0	0	6
13	0	4	3	2	0	0	0	9
14	0	3	0	1	0	0	0	4
15	0	2	2	1	0	0	0	5
16	0	3	0	2	0	0	0	5
17	0	2	1	0	0	0	0	3
18 & OVER	0	2	3	1	0	0	0	6
TOTAL	0	51	21	41	20	7	3	143

Table 2D-7.36

TURKEY POINT DATA

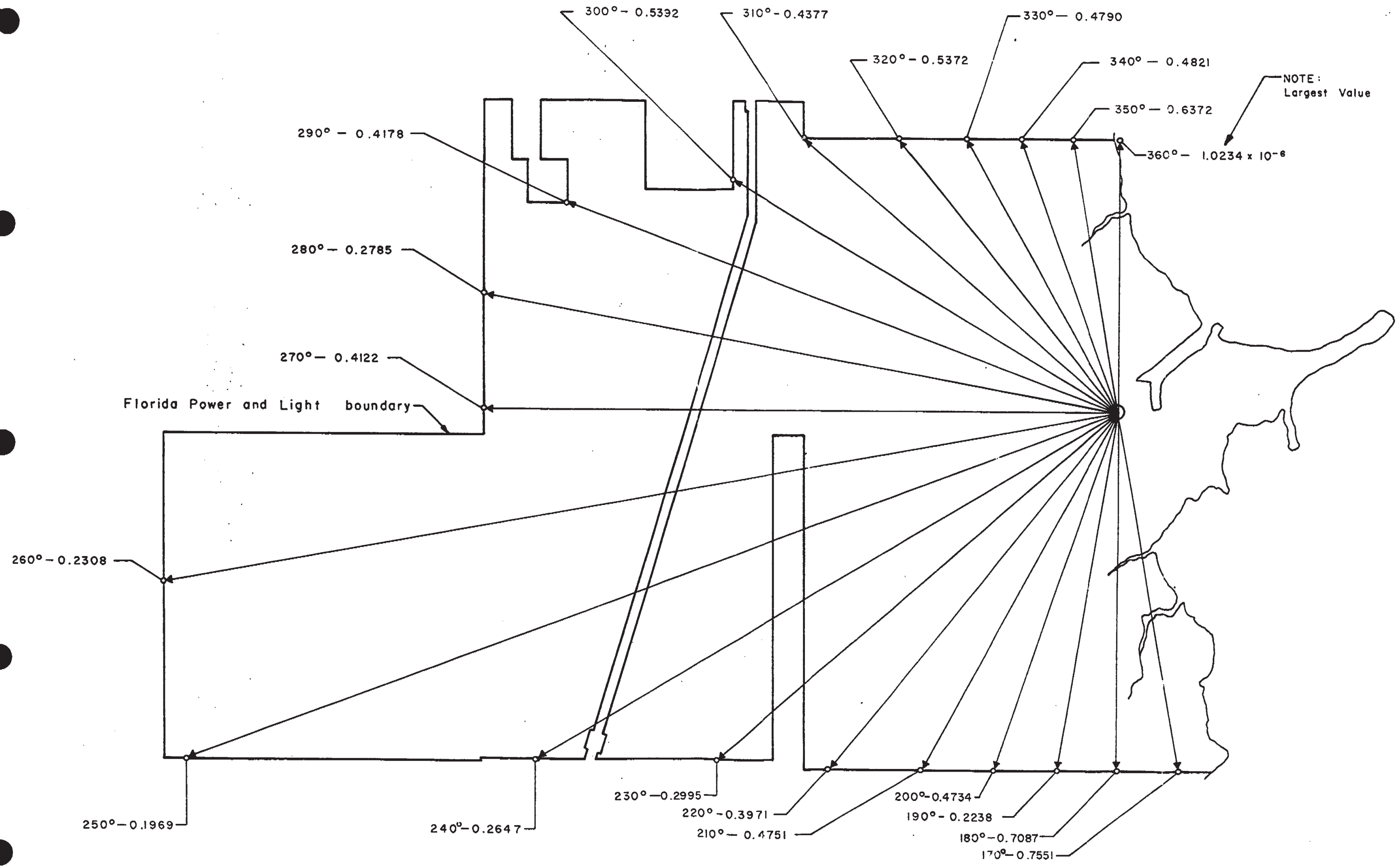
YEAR: 1970 TABLE 2: 30 FT. WIND SPEED VS. TEMPERATURE GRADIENT SNE CODE 2

WIND FROM ALL SECTORS

NUMBER OF HOURLY OCCURRENCES

	------------TEMPERATURE DIFFERENCE (232'-32')------------							
SPEED MPH	-6.0 AND LESS	-5.9 TO -1.5	-1.4 TO -0.8	-0.7 TO 1.5	1.6 TO 3.5	3.6 TO 5.5	5.6 TO 10	TOTAL
0	0	1	1	11	3	0	1	17
1	0	0	2	7	13	1	1	24
2	0	2	10	60	24	4	0	100
3	0	13	27	95	45	11	4	195
4	0	16	40	131	50	14	3	254
5	1	57	127	259	97	18	9	568
6	1	79	119	215	98	22	7	541
7	1	128	174	235	82	19	4	643
8	0	166	249	211	53	6	3	688
9	0	196	209	195	32	3	0	635
10	1	265	287	215	18	0	1	787
11	0	139	162	96	7	1	0	405
12	0	218	226	135	2	1	0	582
13	1	285	240	116	5	0	0	647
14	0	148	133	64	0	0	0	345
15	0	190	175	73	0	0	0	438
16	0	67	108	40	0	0	0	215
17	0	74	112	43	0	0	0	229
18 & OVER	0	178	232	62	0	0	0	472
TOTAL	5	2222	2633	2263	529	100	33	7785

Table 2D-7.37



THREE YEAR AVERAGE OF ANNUAL DILUTION FACTORS (X/Q)
AT THE SITE BOUNDARY FOR 1968, 1969 and 1970
FIG. 2D-1

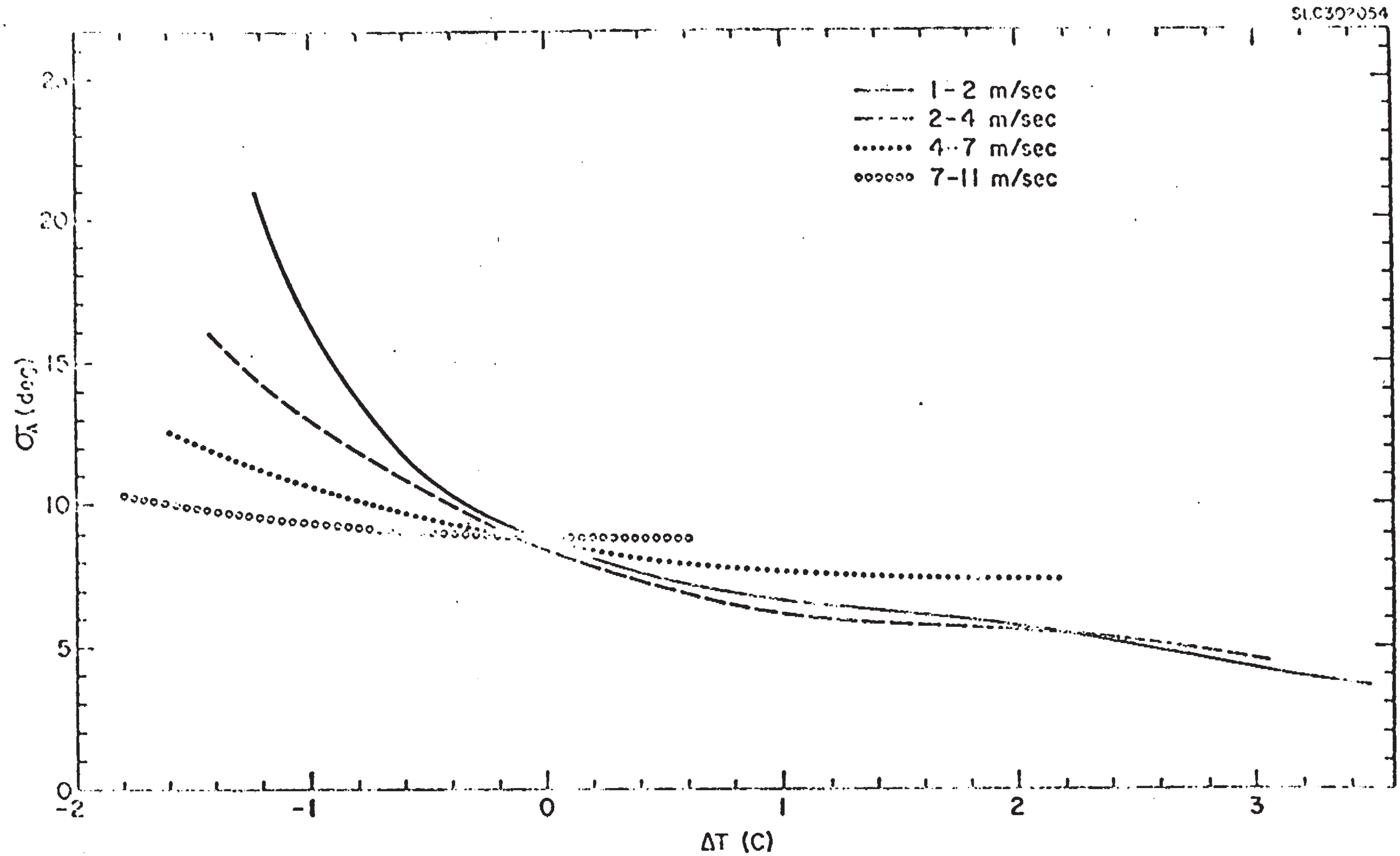


FIGURE 2D-2. Dependence of σ_A at 18 meters on stability and wind speed at 18 meters. ΔT is the temperature at 60 meters minus the temperature at 3 meters.

(Taken from Ref. 2, Fig. 2-13, Cape Kennedy data.)

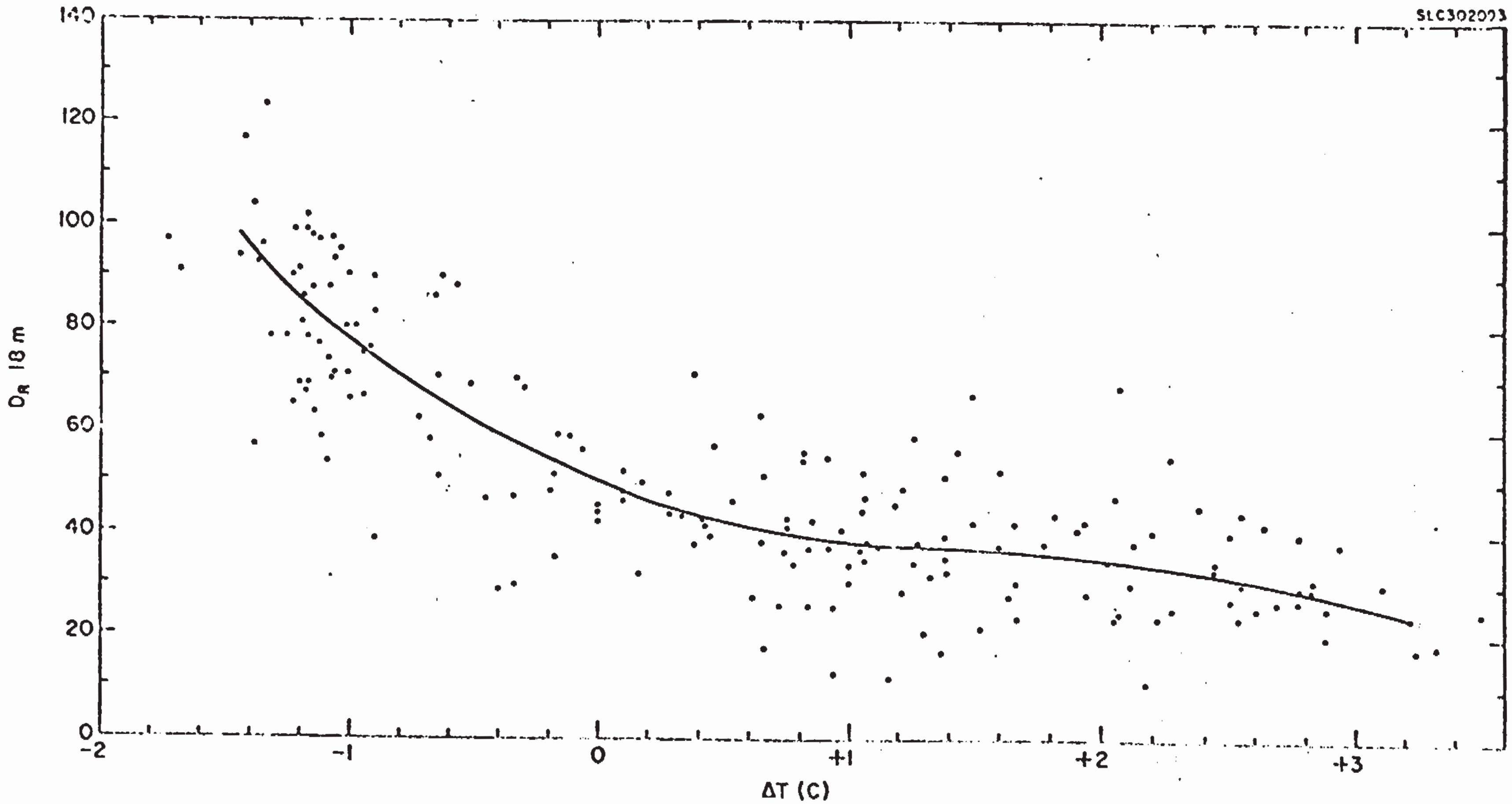


FIGURE 2D-3. Median 10-minute wind direction range at 18 meters versus the temperature difference between 3 meters and 60 meters for the 2-4 meter per second wind speed category.

(Taken from Ref. 2, Fig. 2-14, Cape Kennedy data.)