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FINAL REPORT

Contract No. FA-67-WAI-129

Project No. 197-641-01R

CLIMATOLOGICAL SUMMARIES

VISIBILITIES BELOW 1/2 MILE
AND CEILINGS BELOW 200 FEET

Volume 20

LOS ANGELES, CALIFORNIA
INTERNATIONAL AIRPORT

June 1969

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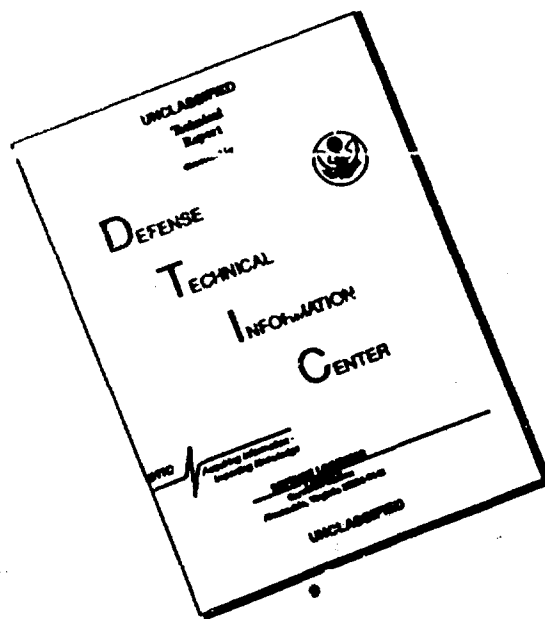
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**VISIBILITIES BELOW 1/2 MILE
AND CEILINGS BELOW 200 FEET**

JUNE 1969

This report has been prepared by U.S. DEPARTMENT OF COMMERCE, Environmental Science Services Administration, Environmental Data Service, National Weather Records Center, Asheville, N.C. for the Systems Research and Development Service, Federal Aviation Administration, under Contract No. FA-67-WAI-129. The contents of this report reflect the views of the contractor, who is responsible for the facts and the accuracy of the data presented herein, and do not necessarily reflect the official views or policy of the FAA. This report does not constitute a standard, specification or regulation.

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Each with four sections:

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2. 1400-2159 Local Standard Time
3. 2200-0659 Local Standard Time
4. All Hours

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INTRODUCTION

The tables contained herein have been prepared and organized for use in evaluating the cost/benefits of all weather landing systems and fog dissipation techniques. Thus, the time intervals of duration of the categories of weather are significant in determining the times of the delay, diversion or cancellation of an aircraft flight resulting from a restricted weather category. This information together with the number and types of aircraft affected by the restricted weather and the costs of a delay, diversion or cancellation combine to provide the total costs resulting from the weather restrictions.

Climatological summaries have been prepared for 41 airports. Their location and associated volume numbers are listed in Table A.

ENVIRONMENT AND INSTRUMENTATION

LOS ANGELES, CALIFORNIA

INTERNATIONAL AIRPORT

The Los Angeles International Airport is situated on a triangular plain bounded on the north and east by the Coastal Range and on the southwest by the Pacific Ocean. The airport is about 11 miles southwest of the main business district of the city of Los Angeles. The Coastal Range (which varies in height from about 4000 to 11500 feet above MSL) extends west-northwest to east-southeast about 30 miles north of the airport and then curves to the south about 100 miles east. The Puente Hills, about 25 miles to the east, rise to 2000 feet above MSL and the Santa Ana Mountains, 50 miles to the southeast, rise to about 5000 feet. The Santa Monica Hills, 12 miles north of the airport, have elevations of almost 2000 feet and the Palos Verdes Hills, 11 miles to the south, have maximum elevations of about 1500 feet above MSL. Near the airport are the Baldwin Hills (4 miles north-northeast) with elevations of about 600 feet above MSL, and a low range of hills about 4 miles east with elevations to 250 feet. The field itself slopes slightly upward from the southeast to the northwest.

The tables in this publication are based on the 10-year period, January 1, 1956-December 31, 1965. Ceiling heights were measured by ceilometer throughout the period. Transmissometers (500 ft. baseline) were commissioned on runway 25 December 1, 1956 on runway 24 October 23, 1963, and on runway 06 November 18, 1963. Location of the airport weather station, its elevation, and the height of wind instrumentation during the period were as follows:

<u>From</u>	<u>To</u>	<u>Lat. N.</u>	<u>Long. W.</u>	<u>Height of Wind Instrument Feet above ground</u>	<u>Station Elevation Feet above MSL</u>
1- 1-56	9-18-59	33° 56'	118° 23'	59	99
9-19-59	12-31-65	33° 56'	118° 23'	20	99

NATURE OF DATA

The data used in the preparation of the climatological tables were extracted from 10 years of WBAN 10-A forms from January 1956 through December 1965. There were two exceptions: The data for Dulles International covered the period January 1963 through December 1965 and for Kansas City-Mid-Continent the period July 1957 through December 1965. All data (Record, Special, Local, Check observations)* were recorded on punched cards to the hour and minute whenever a change occurred in the ceiling, surface visibility, present weather, runway visual range or runway visibility during the time the ceiling was less than 200 feet and/or the surface visibility was less than 1/2 mile. The observation which ended a category of the above conditions was punched and if this observation was not a Record observation, the next Record observation was punched. The elements transcribed were: the time in hours and minutes, ceiling, surface visibility, tower visibility, present weather, temperature, dew-point, surface wind, altimeter setting and remarks concerning runway visual range and runway visibility.

These data should prove to be a valuable source for additional studies where low visibilities are considered.

Runway visual range (RVR) is the operational weather criteria for airport landing systems. The limits of visibility conditions for categories of aircraft operations are presented in Table B. Only Cat. II criteria are currently operational. Because RVR as such, is not available on a uniform basis for the station and period of record under study, visibilities and ceilings were used for delineating categories of weather minimums for landing and take-off operations. The determination of RVR would require:

1. The light setting of the edge lights,
2. the background lighting,
3. the location with respect to runway,
4. a special analyzer to integrate the transmissiometer readings etc.

This information has not often been recorded with the transmissiometer data.

* Except Kansas City - Mid-Continent. Only Record (hourly) observations were taken during the period of record at this station; 16 hours per day (0700-2200) through November 1957 and 24 hours per day December 1957 through December 1965.

EXPLANATION OF TABLES

All the tables of climatological summaries except Table I are based on the reported visibilities of less than 1/2 mile and/or ceilings less than 200 feet.

The tables of climatological summaries in these publications include:

- (1) reported visibility and ceiling values versus time intervals of duration.
- (2) weather categories of aircraft landing systems based on their relationship to ceiling and visibility as presented in Table C, versus intervals of duration. This is Table X only.
- (3) percentage frequency of wind direction versus wind speed for each category of aircraft landing system using the relationship of Table C for Record observations only. These are presented for 13 stations only. This is Table XI only.*
- (4) weather categories of landing systems based on their relationship to ceilings and visibility as presented in Table E, versus intervals of duration. These tables are also summarized on the basis of wind speed and temperature values.

* These stations are:

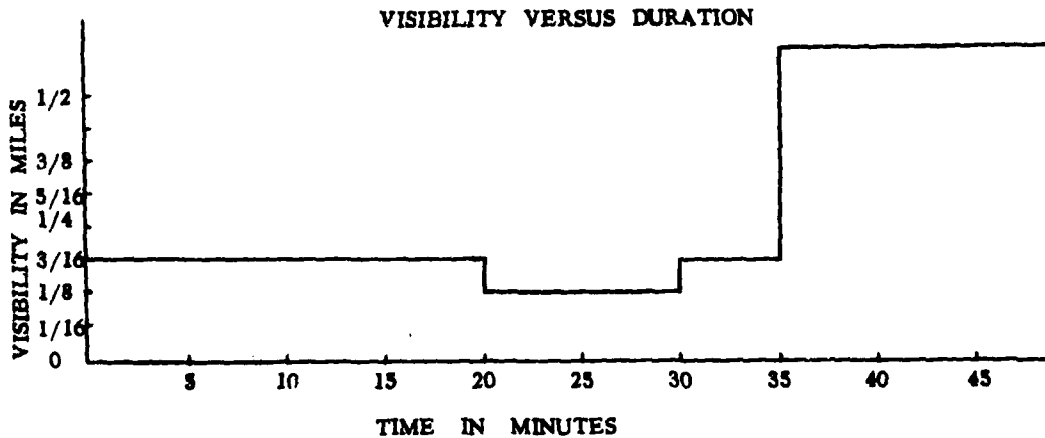
Los Angeles International, Oakland International, Chicago O'Hare, San Francisco International, Greater Buffalo International, Washington National, Washington Dulles International, Atlanta, Newark, New York J. F. K., Philadelphia International, New York La Guardia, Cleveland Hopkins International

REPORTED VISIBILITY AND CEILING VALUES VERSUS INTERVALS OF DURATION

Nine summaries are presented. In Tables I - V the values represent the individual incidents of specified ceiling and visibility. Thus, in Table III 3/8 mile visibility with 100 ft. ceiling occurs with a specific frequency for each interval of duration.

In Tables VI to IX, the frequency of occurrence represents visibilities for specific conditions of ceilings at or below the listed visibility. They are cumulative incidents wherein the total time at or below a certain visibility value for the ceiling value specified is considered as one incident. Thus, if in Table VII there are 172 incidents of 3/8 mile in the interval of 1-15 minutes, it represents 172 times during the 10-year period that visibilities 3/8 mile or less with ceilings 100 feet.

Another example which combines the entries in the individual and the cumulative tables is as follows: If visibility is distributed as shown in the figure, for ceiling 100 feet, if for 20 minutes the visibility was 3/16 then went to 1/8 for 10 minutes, then went to 3/16 for 5 minutes and then to greater than 1/2 mile visibility in Table III there would be 2 counts for 3/16, one under 16-30 minutes and one under 1-15 minutes; and one count for 1/8 under 1-15 minutes; whereas, in the cumulative table for visibilities at or below a given visibility with 100-foot ceilings - Table VII in the 3/8, 5/16, 1/4 and 3/16 mile categories there would be one count under 31-45 minutes (actually 35 minutes) and one count in 1/8 mile category under 1-15 minutes (actually 10 minutes).



To estimate the total time of occurrence for a particular interval of time for the period of record one multiplies the average of time period by the frequency of occurrence of the specified conditions for this time period. Thus, if visibility of 3/8 mile with ceiling 100 feet (Table III) occurred 14 times between 16-30 minutes, the estimated total time would be 14 x 23 or 322 minutes.

WEATHER CATEGORIES OF AIRCRAFT LANDING SYSTEMS VERSUS INTERVALS OF DURATION BASED ON TABLE D

A single table (Table X) based on Table C for the period of record is presented. Table C is based on the current practices relating RVR to meteorological visibilities as shown in Table D.

Table X is in three sections:

Xa. Frequency of occurrence of the landing categories versus the indicated duration intervals:

In this summary Categories II, IIIa, IIIb, and IIIc are represented by the frequency of these conditions occurring during the specified intervals.

In Category II + III the frequency represents the visibilities and ceilings at or below Category II weather, i. e., below 200 feet and/or 1/2 mile for a continuous period of time.

In Category III, the number of occurrences represent the frequency the weather was in in Category IIIa and IIIb/c i.e., observation below 1/4 mile and equal to and above 1/4 mile when the ceiling is reported as zero for a continuous period of time.

Xb. Total time in each duration versus the duration intervals in hours and tenths of hours. The entries in this table are arrived by adding the times in minutes associated with the frequencies above. These totals are converted to hours and tenths. This table also contains the percentage of time for the 10-year period of observations of specified duration intervals, i. e., 1-90, 91-all, 1-all. This table is derived by dividing the total time under each category for the specified duration interval by the total number of hours. Thus the percentage value for Category II + III the 1-all group (last column, 4th value down) represents the frequency of occurrence for the ten-year period in percent of visibility and ceilings below 1/2 mile and/or 200 feet.

Xc. Average time in each duration versus the duration intervals.

This table is derived by dividing the total time in minutes of each item in Table Xb by the frequency of occurrence in Table Xa.

WIND DIRECTION VERSUS SPEED BY PERCENTAGE FREQUENCY (Table XI)

Table XI (for 13 stations) (unnumbered on summaries) show the percentage distribution of the different categories in accordance with Table D by wind direction to 16 points versus specified speed intervals. These categories, II, IIIa and IIIb/c, are divided into 2100-0500 and 0600-2000 hour groups making a total of six sub-tables.

Only the hourly (Record) observations when Category II or below conditions exist are used in these summaries. The percentages are determined by dividing the number of hourly observations which were recorded during the entire period of record for the indicated hour group. The percentage figures can be combined to obtain percentages for the quadrants of different speed intervals.

WEATHER CATEGORIES OF LANDING SYSTEMS VERSUS INTERVALS OF DURATION BASED ON TABLE E

Nine tables XII - XXI are presented for the ten-year period. These tables are presented in three sections:

a. Frequency of occurrences of landing categories versus duration intervals:

Categories II, IIIa, IIIb, and IIIc are represented by the total time for the specified hour group that these conditions occur during the indicated intervals.

In Categories II + III the frequency represents the visibilities and ceilings at or below Category II weather e. g., below 2400 RVR. In Category III the frequency represents the visibilities at or below Category III weather e. g., below 1200 RVR.

b. Total time in each duration versus the duration intervals hours and tenths.

The entries in this table are derived by adding the time in minutes associated with the frequency above and converting them to hours and tenths.

c. Average time in each duration versus the duration intervals.

This table is derived by dividing the total time in minutes of each value in b by the corresponding frequency of occurrence in a.

In these tables, since the period of duration is the important element, each incident of weather is attributed to the hour group during which it began. Thus, if Category IIIa weather began in the 22-06 hour group and continued into the 07-13 hour group the total time is placed in the 22-06 group. It is probable, then, that the incidence of the various categories may be over-estimated in the 22-06 group. The totals appearing in the all hour group, however, are correct.

The sum of Categories IIIa, IIIb, and IIIc in the all-hour groups and sometimes in the other hour groups are frequently greater than under Cat. III. This results from the addition of 5% of observations of 3/16 mile or greater with ceiling 100 feet added to Cat. IIIa, whereas, this 5% is not included in the Cat. III totals at the bottom of each table.

The difference between Cat. III totals and the sum of Cat. IIIa, IIIb, and IIIc are subtracted from the Cat. II totals for the all-hour group and appears at the end of the Cat. II line with an asterisk. This value is a better estimate of the occurrence of Cat. II weather for the 10-year period.

EXPLANATION OF TABLE E

The relationship of RVR with light setting 5 for a 500' baseline to the meteorological report of visibility, based on the information in Circular N^{1/}, is given in Table F. This was the basis for establishing the relationships in Table E. The use of the highest setting for the edge lights for approaches in low visibility is the current operational practice. Although the selection of some of the relationships in Table E have been somewhat arbitrary, it can be expected that the observers report of low visibilities and ceilings will be more inexact than the cut off point of these relationships.

^{1/} Manual of Surface Observations (WEAN). Circular N, Weather Bureau, Washington, D. C. NAVAIR 501D503, July 1968 (AD672-366)

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This is one of 41 volumes of Report RD-69-22. The volumes are as follows:

<u>VOL.</u>	<u>CITY</u>	<u>AIRPORT</u>
1.	Anchorage, Alaska	International
2.	Atlanta, Georgia	Atlanta
3.	Baltimore, Maryland	Friendship International
4.	Birmingham, Alabama	International
5.	Boston, Massachusetts	General E. L. Logan International
6.	Buffalo, New York	Greater Buffalo International
7.	Burbank, California	Hollywood-Burbank
8.	Chicago, Illinois	O'Hare International
9.	Cincinnati, Ohio	Greater Cincinnati
10.	Cleveland, Ohio	Cleveland-Hopkins International
11.	Columbus, Ohio	Port Columbus International
12.	Dallas, Texas	Love Field
13.	Dayton, Ohio	James M. Cox Municipal
14.	Denver, Colorado	Stapleton International
15.	Detroit, Michigan	Detroit Metropolitan-Wayne County
16.	Hartford, Connecticut	Bradley International (Windsor Locks)
17.	Houston, Texas	William P. Hobby
18.	Indianapolis, Indiana	Weir Cook
19.	Kansas City, Missouri	Mid-Continent International
20.	Los Angeles, California	International
21.	Louisville, Kentucky	Standiford Field
22.	Miami, Florida	International
23.	Milwaukee, Wisconsin	General Mitchell Field
24.	Minneapolis, Minnesota	Minneapolis-St. Paul International
25.	Nashville, Tennessee	Metropolitan
26.	Newark, New Jersey	Newark
27.	New Orleans, Louisiana	International
28.	New York, New York	John F. Kennedy International
29.	New York, New York	La Guardia
30.	Oakland, California	Metropolitan Oakland International
31.	Philadelphia, Pennsylvania	International
32.	Pittsburgh, Pennsylvania	Greater Pittsburgh International
33.	Portland, Oregon	International
34.	Rochester, New York	Rochester-Monroe County
35.	St. Louis, Missouri	Lambert-St. Louis Municipal
36.	Salt Lake City, Utah	Municipal No. 1
37.	San Francisco, California	International
38.	Seattle, Washington	Seattle-Tacoma International
39.	Syracuse, New York	Clarence E. Hancock
40.	Washington, D. C.	Dulles International
41.	Washington, D. C.	National

TABLE A

LIMITS OF LANDING CATEGORIES

- * CAT. II Operations down to minima below 200 feet decision height and 2400 RVR and to as low as 100 feet decision height and 1200 RVR.
- ** CAT. IIIA Below 100 feet decision height and 1200 RVR and to as low as 50 feet decision height and 700 RVR.
- ** CAT. IIIB Below 700 RVR to 150 RVR.
- ** CAT. IIIC No external visual reference.

TABLE B

- * Current operational criteria
- ** Criteria not firm, used for planning purposes

**CEILING AND VISIBILITY EQUIVALENTS FOR CATEGORIES
OF AIRCRAFT LANDING OPERATIONS CURRENT PRACTICE
CRITERIA for Table X and XI**

Category II:	<p>Visibility = 1/2 and ceiling = 100</p> <p>Visibility = 3/8 and ceiling \neq 0</p> <p>Visibility = 5/16 and ceiling \neq 0</p> <p>Visibility = 1/4 and ceiling \neq 0</p>
Category III-a:	<p>Visibility = 1/4 and ceiling = 0</p> <p>Visibility = 3/16 and all ceilings</p> <p>Visibility = 1/8 and all ceilings</p>
Category III-b/c:	<p>Visibility = 1/16 and all ceilings</p> <p>Visibility = 0 and all ceilings</p>
Category III:	The sum of IIIa, IIIb, and IIIc

TABLE C

RVR VERSUS VISIBILITY (Current Practice)

METEOROLOGICAL VISIBILITY	RVR EQUIVALENT
Statute Miles (feet)	Feet
3/16 (990 feet)	1200
* 1/4 (1320 feet)	1600
* 1/2 (2640 feet)	2400

TABLE D

*** United States Standard for Terminal Instrument
Procedures (TERPs), Federal Aviation Agency, September 1966.**

**CEILING AND VISIBILITY EQUIVALENTS FOR
CATEGORIES OF AIRCRAFT LANDING OPERATIONS
Criteria for Tables XII-XXI**

Category II
Below 2400 ft. RVR to
1200 ft. RVR

Equivalent Meteorological Observations

All observations with visibilities greater than 3/8 mile with ceiling 100 feet.

All observations of 3/8 mile with ceiling not equal to zero.

All observations of 5/16 mile with ceiling not equal to zero.

All observations of 1/4 mile with ceiling not equal to zero.

All observations of 3/16 mile with ceiling not equal to zero.

Category III
Category IIIa
Below 1200 ft. RVR to
700 ft. RVR

All observations of 1/8 mile.

All observations of 3/16 mile or greater with zero ceiling.

5% of observations of 3/16 mile or greater with ceiling 100.

Category IIIb
Below 700 ft. RVR to
150 ft. RVR

All observations of 1/16 mile.

50% of all observations of zero miles.

Category IIIc
Below 150 ft. RVR

50% of observations of zero miles.

TABLE E

RVR VERSUS METEOROLOGICAL VISIBILITY

Circular N

Reported Meteorological Visibilities Miles (feet)	RVR (500 ft. baseline) at Setting 5		Category
	Day	Night	
0 (less than 330 feet)	*	*	(IIIc and IIIb)
1/16 (330 feet-650 feet)	*	*	(IIIb)
1/8 (660 feet-980 feet)	1000-1400	*	(IIIb and IIIa)
3/16 (990 feet-1310 feet)	1400-1800	1200-1800	(Cat. II)
1/4 (1320 feet-1640 feet)	1800-2200	1800-2200	(Cat. II)

* No determination of RVR with respect to meteorological visibility.

TABLE F

LOS ANGELES, INTERNATIONAL

FREQUENCY OF INTERVALS OF DURATION VERSUS CATEGORIES OF VISIBILITIES JANUARY 1966 - DECEMBER 1966

TABLE I. VISIBILITY ≥ 1/2 MILE WHEN CEILING < 200 FEET.

DURATION IN MINUTES	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	24	13	9	4		1					

TABLE II. (IRRESPECTIVE OF CEILING).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	251	72	30	14	10	3	2				
5/16	89	27	9	5	2						
1/4	444	103	44	11	13	1	2				
3/16	219	81	25	12	9	1	2				
1/8	311	110	63	26	23	13	7	2	3	3	
1/16	150	98	57	24	21	17	17	9	14	3	1
0	37	24	16	21	26	14	27	13	14	3	1

TABLE III. (CEILING 100 FEET).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	44	14	6		3	1					
5/16	17	3	3	1							
1/4	123	34	14	3	3	1	1				
3/16	104	42	13	7	4		1				
1/8	120	37	24	9	10	6	3				
1/16	37	24	13	3	8	4	2	2	1		
0	4	1	1								

TABLE IV. (CEILING ZERO).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	1	2									
5/16	1										
1/4	15	4	1								
3/16	23	9	3	1							
1/8	104	42	16	6	11	3	3	1			
1/16	104	44	34	30	24	10	12	4	3	3	
0	31	24	19	20	23	14	29	11	13	3	1

TABLE V. (CEILING 100 FEET OR ZERO).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	43	13	7	1	3	1					
5/16	18	3	3	1							
1/4	133	39	13	2	5	1	1				
3/16	121	33	20	6	5						
1/8	212	84	44	17	20	10	5	2			
1/16	124	79	50	30	37	14	14	7	5	3	
0	33	27	20	20	23	14	29	11	15	3	1

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSIFIED AS ONE INCIDENT
TABLE VI. (IRRESPECTIVE OF CEILING).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	69	74	44	44	69	31	71	30	32	34	21
5/16	64	41	41	43	38	31	30	29	30	33	27
1/4	30	36	47	35	36	48	51	39	32	33	26
3/16	33	39	44	28	32	38	34	36	43	29	22
1/8	41	34	33	21	39	40	33	26	46	22	19
1/16	23	29	19	13	44	22	19	24	34	13	11
0	13	14	7	8	20	11	10	13	21	9	3

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSIFIED AS ONE INCIDENT
TABLE VII. (CEILING 100 FEET).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	172	113	34	34	43	19	16	3	7		
5/16	148	102	33	37	40	17	14	3	7		
1/4	167	99	39	33	40	14	13	4	6		
3/16	128	82	40	27	34	12	12	3	5		
1/8	160	63	32	16	18	13	7	2	4		
1/16	30	22	13	3	10	3	3	2	1		
0	4	1	1								

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSIFIED AS ONE INCIDENT
TABLE VIII. (CEILING ZERO).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	44	41	42	23	34	29	29	26	30	12	9
5/16	44	40	42	23	39	29	29	26	30	12	9
1/4	46	40	42	23	39	29	29	26	30	12	9
3/16	42	40	43	22	34	27	26	24	30	12	9
1/8	44	38	44	21	33	29	26	24	30	11	9
1/16	34	40	30	27	30	18	23	22	26	9	9
0	14	23	13	13	17	9	22	13	14	9	3

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSIFIED AS ONE INCIDENT
TABLE IX. (CEILING 100 FEET OR ZERO).

VISIBILITY	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	64	74	31	39	31	43	44	26	47	19	13
5/16	63	71	30	41	43	43	41	28	43	19	13
1/4	61	69	49	35	43	44	39	29	44	19	13
3/16	32	37	32	26	47	40	39	28	42	17	13
1/8	34	49	30	24	33	39	39	31	36	14	14
1/16	31	43	28	17	34	22	24	26	30	9	11
0	16	20	12	11	16	11	21	14	19	9	3

TABLE X

LOS ANGELES, INTERNATIONAL

JANUARY 1956 - DECEMBER 1965

ALL SEASONS

ALL HOURS

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES													
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
II	445	161	89	42	37	17	15	5				774	37	811
IIIA	290	156	75	46	52	19	16	2	5			1	617	680
IIIB/C	70	40	31	27	52	25	29	26	27	12		10	240	368
II + III	59	67	42	45	69	54	73	31	51	34		33	282	558
III	78	74	50	31	63	36	46	34	45	25		17	296	499

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES											PERCENTAGE					
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	1-90	91-ALL	1-ALL
II	68.8	63.2	57.5	37.8	46.5	30.3	37.2	16.1				273.8	83.5	357.3	.31	.10	.41
IIIA	92.3	64.6	48.8	41.7	65.0	33.4	39.8	4.8	24.5			10.4	272.2	119.7	.31	.13	.44
IIIB/C	19.0	24.8	20.4	25.8	88.3	44.5	71.2	93.7	132.6	82.8		108.1	155.9	532.9	.18	.61	.78
II + III	10.5	24.9	26.8	39.8	85.3	98.3	178.1	107.0	252.7	237.1		368.8	189.1	1241.8	.22	1.42	1.63
III	13.9	30.5	32.0	27.4	78.7	64.5	113.2	120.0	219.4	173.8		200.3	182.5	891.1	.21	1.02	1.22

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES													
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
II	9.3	23.5	38.7	34.0	75.4	106.8	148.7	192.8				21.2	135.4	26.4
IIIA	10.8	25.1	39.0	34.3	75.0	105.6	149.3	197.5	294.0			623.0	26.5	160.1
IIIB/C	12.9	24.8	39.5	34.8	78.8	106.8	147.2	216.3	294.8	414.1		648.6	38.5	247.8
II + III	10.7	24.1	38.3	32.8	74.2	109.2	146.4	207.0	297.3	418.3		670.5	40.2	270.0
III	10.7	24.7	38.4	33.1	74.9	107.5	147.6	211.7	292.5	417.2		706.9	37.0	263.4

TOTAL OBSERVATION HOURS 87672

LOS ANGELES, INTERNATIONAL
WIND DIRECTION VERSUS SPEED BY PERCENTAGE FREQUENCY
JANUARY 1956 - DECEMBER 1965

TABLE XI

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
II	21-05	N		2.1				2.1
		NNE		1.1				1.1
		NE		4.2				4.2
		ENE		7.9	1.6			9.5
		E		6.3	4.2			10.5
		ESE		7.9	1.6			9.5
		SE		5.0	1.6			6.6
		SSE		2.1	1.6			3.7
		S		3.2	.5			3.7
		SSM		2.1				2.1
		SM		1.1				1.1
		WSM		1.6	1.1			2.6
		W		8.4	5.0			13.4
		WNW		5.2	.5			5.7
		WW		1.1				1.1
		WNW		1.1				1.1
		CALM		22.6				22.6
TOTAL		22.6	58.9	10.4			100.0	
TOTAL RECORD OBSERVATIONS 190								

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
II	06-20	N		1.1				1.1
		NNE		1.1				1.1
		NE		4.0	1.7			5.7
		ENE		5.1	1.7			6.8
		E		8.9	4.3			13.2
		ESE		2.8	4.0			6.8
		SE		4.0	.6			4.6
		SSE		2.9	.6			3.5
		S		.6	.6			1.2
		SSM		.6				.6
		SM		1.1	1.1			2.2
		WSM		5.7	5.1			10.8
		W		5.7	8.0	.6		14.3
		WNW		5.1	1.7			6.8
		WW		4.0	1.1			5.1
		WNW		.6				.6
		CALM		15.2				15.2
TOTAL		15.2	52.3	31.8	.6		100.0	
TOTAL RECORD OBSERVATIONS 176								

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
IIIA	21-05	N		1.2	.4			1.7
		NNE		1.7	.4			2.1
		NE		3.7	.4			4.1
		ENE		6.6	1.2			7.8
		E		10.0	5.3			15.3
		ESE		6.6	5.3			11.9
		SE		3.7	.4			4.1
		SSE		2.1	.4			2.5
		S		2.5	.4			2.9
		SSM		1.7				1.7
		SM		3.7	.4			4.1
		WSM		5.4	.4			5.8
		W		8.7	2.9			11.6
		WNW		4.1	1.2			5.3
		WW		1.7	.4			2.1
		WNW		1.7	.4			2.1
		CALM		20.3				20.3
TOTAL		20.3	63.9	15.8			100.0	
TOTAL RECORD OBSERVATIONS 241								

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
IIIA	06-20	N		2.3				2.3
		NNE						
		NE		2.3				2.3
		ENE		5.0	3.0			8.0
		E		7.6	6.8	.6		15.0
		ESE		6.8	3.0			9.8
		SE		4.9	.6			5.5
		SSE		.6				.6
		S						
		SSM			.6			.6
		SM		3.8	.6			4.4
		WSM		4.9	2.0	.6		7.5
		W		5.3	12.1	.6	.6	18.6
		WNW		6.8	1.5			8.3
		WW		2.3				2.3
		WNW		1.3				1.3
		CALM		15.2				15.2
TOTAL		15.2	51.9	31.1	1.3	.6	100.0	
TOTAL RECORD OBSERVATIONS 132								

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
IIIB/C	21-05	N		1.6				1.6
		NNE		1.6	.2			1.8
		NE		1.6	.4			2.0
		ENE		10.1	.6			10.7
		E		12.6	5.9			18.5
		ESE		11.6	5.9			17.5
		SE		4.1	1.2			5.3
		SSE		1.7	.6			2.3
		S		1.7	.2			1.9
		SSM		.6	.4			1.0
		SM		.2	.2			.4
		WSM		1.6	.2			1.8
		W		4.1	1.0			5.1
		WNW		2.3	.4			2.7
		WW		1.6				1.6
		WNW		1.6				1.6
		CALM		38.2				38.2
TOTAL		38.2	57.6	12.0			100.0	
TOTAL RECORD OBSERVATIONS 517								

PERCENTAGE FREQUENCY OF OCCURRENCE

CATEGORY	HOUR GROUP	WIND DIRECTION	SPEED (KNOTS)				21+	TOTAL
			CALM	1-5	6-10	11-15		
IIIB/C	06-20	N		1.1				1.1
		NNE		2.2				2.2
		NE		.6				.6
		ENE		6.7	.6			7.3
		E		10.7	3.4			14.1
		ESE		7.9	2.2			10.1
		SE		4.9	2.8			7.7
		SSE		3.1	.6			3.7
		S		2.8				2.8
		SSM		.6				.6
		SM		.6				.6
		WSM		1.7				1.7
		W		7.9	3.9			11.8
		WNW		4.9	.6			5.5
		WW		4.9	.6			5.5
		WNW		1.7				1.7
		CALM		25.6				25.6
TOTAL		25.6	62.4	14.0			100.0	
TOTAL RECORD OBSERVATIONS 170								

LOS ANGELES, INTERNATIONAL

TABLE AII - ALL CONDITIONS.

0700 - 1300

(25571 OBSERVATION HOURS)

JANUARY 1956 - DECEMBER 1965

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	65	38	78	13	3	3						147	7	154	
IIIA	43	20	13	5	1	1						82	1	83	
IIIB	23	19	1	2	1							52		52	
IIIC	2	2										5		5	
II + III	7	12	3	4	5	1				4		33	5	38	
III	11	7	6	3	2	3	1					29	4	33	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	9.9	14.8	17.7	11.3	3.5	5.6	0.8					37.3	15.3	72.6	
IIIA	8.0	8.1	8.3	4.5	1.5	1.9						28.7	1.9	30.6	
IIIB	5.0	6.4	4.0	2.0	1.4							20.7		21.2	
IIIC	0.4	0.8										2.2		2.4	
II + III	1.1	5.0	2.9	3.4	6.4	1.6	9.7					18.8	11.2	30.0	
III	2.1	2.2	3.7	2.6	2.3	5.5	2.1					13.0	7.6	20.6	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	9.2	23.3	38.0	52.1	70.3	111.0	146.3					29.4	131.1	28.3	
IIIA	11.1	24.2	39.3	54.2	90.0	115.0						21.0	115.0	22.1	
IIIB	12.0	25.4	40.1	58.5	85.0							23.8		24.5	
IIIC	11.8	24.7		58.5		100.0						26.4	100.0	33.8	
II + III	9.1	23.2	34.2	51.0	77.2	99.0	145.3					34.2	134.8	47.4	
III	11.6	19.1	37.2	51.3	69.5	110.7	126.0					26.8	114.5	37.5	

1400 - 2100

(29824 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	64	33	18	10	13	6						138	11	149	
IIIA	47	19	10	7	4	4						87	7	94	
IIIB	35	9	5	7	6	2						62	11	73	
IIIC	4	15	2	2	2	1						10	9	19	
II + III	13	15	8	13	15	10						18	64	82	
III	23	14	3	8	6	6						12	56	68	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	9.4	12.6	11.7	9.0	16.9	10.5	12.0					59.5	22.5	82.0	
IIIA	8.0	7.9	6.7	6.4	4.9	7.0	5.2	4.0				32.7	16.1	48.8	
IIIB	7.5	3.6	3.5	6.3	8.4	3.8	7.0					29.1	47.9	77.0	
IIIC	0.9	2.2	1.2	1.8	2.9	1.8	6.8	3.3	19.7	13.3		10.5	7.0	27.5	
II + III	2.2	6.0	5.0	11.4	18.8	17.4	32.5	7.0	48.8	7.6	235.0	43.3	348.2	391.5	
III	6.4	5.7	1.9	7.4	8.4	10.8	6.4	7.9	39.7	13.7	141.7	27.8	216.8	244.6	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	8.8	22.8	38.9	59.7	78.2	104.7	144.2					29.9	122.0	33.0	
IIIA	10.2	25.0	39.9	54.6	73.0	104.5	154.3	240.0				22.5	138.3	29.8	
IIIB	11.9	22.7	41.4	54.0	83.7	112.5	139.0		396.3	397.5		25.1	261.3	55.2	
IIIC	12.6		37.3	53.7	86.3	107.5	135.4	195.0	320.0	411.0	630.0	41.3	237.3	126.3	
II + III	10.2	23.8	37.3	52.5	75.2	104.5	149.8	210.0	292.3	455.0	783.3	40.6	386.9	199.0	
III	10.6	24.4	38.3	53.6	85.5	108.0	141.5	223.5	286.7	412.0	706.3	29.8	294.2	164.9	

2200 - 0600

(32877 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	262	110	87	36	37	16						512	40	552	
IIIA	231	86	49	22	21	10						409	28	437	
IIIB	115	86	50	37	47	23						335	74	409	
IIIC	13	12	7	8	11	6						31	31	62	
II + III	39	40	29	28	49	43						156	217	402	
III	63	42	41	20	42	37	38	29	38	18	1	211	137	368	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	43.9	43.5	43.3	33.0	44.6	29.1	42.2	16.6	11.1			208.2	98.9	307.2	
IIIA	49.2	36.7	32.5	20.2	28.5	29.1	23.4	3.4	5.2			150.4	62.4	212.8	
IIIB	24.4	37.5	34.3	33.3	40.7	42.3	67.9	49.5	40.0	15.5		192.2	213.2	406.3	
IIIC	2.8	6.4	4.9	7.5	14.1	11.5	38.2	21.1	24.8	7.0		36.3	125.3	178.7	
II + III	7.3	15.9	19.0	24.8	40.0	79.5	133.9	100.0	203.9	229.5	133.8	126.9	882.4	1009.4	
III	12.9	18.0	26.6	18.3	31.6	67.1	94.1	89.2	190.2	125.2	10.9	127.4	576.6	704.0	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	10.0	23.7	38.8	55.0	72.4	109.2	148.9	198.8	231.3			24.4	148.4	33.4	
IIIA	11.7	25.6	34.6	35.1	75.7	109.3	156.1	197.5	209.0			23.5	133.6	90.0	
IIIB	12.7	26.2	41.2	37.2	77.5	110.3	150.8	212.3	300.0	404.0		34.6	175.0	59.6	
IIIC	12.6	27.0	42.1	36.3	77.2	113.0	154.4	211.2	298.3	417.5		40.9	198.1	99.9	
II + III	11.2	23.8	39.3	33.2	73.4	110.7	149.6	204.8	298.4	417.5	533.1	41.2	264.0	130.7	
III	11.9	25.1	38.9	34.9	73.8	108.8	148.5	214.0	300.3	417.4	652.0	36.2	226.4	114.8	

ALL

(87672 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	391	181	112	89	33	25						797	88	885	
IIIA	321	129	71	32	24	20						579	34	607	
IIIB	178	111	63	46	34	26						481	87	568	
IIIC	19	13	8	11	13	7						64	39	103	
II + III	99	67	42	48	69	54						33	282	336	
III	101	64	50	31	50	44	43	27	43	20	13	296	194	490	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	63.1	70.8	72.7	53.3	65.1	45.1	64.0	16.6	11.1			323.0	136.7	461.7	
IIIA	61.1	52.7	47.0	29.3	30.1	30.3	26.3	10.6	5.2			220.2	76.2	292.5	
IIIB	36.7	47.9	44.4	43.3	70.6	47.8	74.8	49.4	65.0	26.7		249.1	288.7	514.7	
IIIC	3.8	5.9	4.8	10.3	17.1	13.8	38.2	24.8	40.4	13.8		42.7	135.6	178.4	
II + III	10.3	26.9	26.8	34.6	85.2	94.3	178.1	107.0	222.7	237.1	16.5	126.9	1241.8	1630.8	
III	19.3	25.9	32.2	28.3	62.3	85.9	109.6	96.6	223.9	139.0	132.6	168.1	801.0	969.2	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-									

LOS ANGELES, INTERNATIONAL
 TABLE XIII - TEMPERATURE < 33 DEGREES (F),
 0700 - 1300 (2557) OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1965

NO OCCURRENCE OF DATA

1400 - 2100 (29224 OBSERVATION HOURS)

NO OCCURRENCE OF DATA

2200 - 0600 (32477 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE		TIME IN MINUTES												
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II		1			1							1		1
IIIA												2		2
IIIB														
IIIC														
II + III						1	1					1	1	1
III														
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			.5									1.0		1.5
IIIA		.3										.5		1.4
IIIB					1.2							1.4		1.4
IIIC														
II + III							1.7					1.2	1.7	1.7
III					1.2									1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			30.0									30.0		30.0
IIIA		19.0										42.5		42.5
IIIB					70.0									
IIIC														
II + III						100.0						70.0	100.0	100.0
III					70.0									70.0
16762 OBSERVATION HOURS														
ALL														
FREQUENCY OF OCCURRENCE		TIME IN MINUTES												
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II		1			1							1		1
IIIA												2		2
IIIB														
IIIC														
II + III						1	1					1	1	1
III														
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			.5									1.0		1.5
IIIA		.3										.5		1.4
IIIB					1.2							1.4		1.4
IIIC														
II + III							1.7					1.2	1.7	1.7
III					1.2									1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			30.0									30.0		30.0
IIIA		19.0										42.5		42.5
IIIB					70.0									
IIIC														
II + III						100.0						70.0	100.0	100.0
III					70.0									70.0

LOS ANGELES, INTERNATIONAL
 TABLE XIV - TEMPERATURE < 33 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND < 9 KNOTS.
 0700 - 1300 (2587) OBSERVATION HOURS JANUARY 1956 - DECEMBER 1963

NO OCCURRENCE OF DATA

1400 - 2100 (2922) OBSERVATION HOURS

NO OCCURRENCE OF DATA

7200 - 0600 (32877 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II		1										1		1
IIIA	1					1						2		2
IIIB														
IIIC							1						1	1
II + III												1	1	1
III					1									1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II												.5		.5
IIIA	.3	.5				1.2						1.4		1.4
IIIB														
IIIC														
II + III													1.7	1.7
III					1.2							1.2	1.7	1.7
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II												30.0		30.0
IIIA	15.0					70.0						42.5		42.5
IIIB														
IIIC														
II + III													100.0	100.0
III					70.0							70.0	100.0	70.0
ALL (87672 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II		1										1		1
IIIA	1					1						2		2
IIIB														
IIIC							1						1	1
II + III												1	1	1
III					1									1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II												.5		.5
IIIA	.2	.5				1.2						1.4		1.4
IIIB														
IIIC														
II + III													1.7	1.7
III					1.2							1.2	1.7	1.7
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480				
II												30.0		30.0
IIIA	15.0					70.0						42.5		42.5
IIIB														
IIIC														
II + III													100.0	100.0
III					70.0							70.0	100.0	70.0

LOS ANGELES INTERNATIONAL
TABLE XV - TEMPERATURE < 33 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND 9-12 KNOTS,
JANUARY 1956 - DECEMBER 1965

NO OCCURRENCE OF DATA

LOS ANGELES INTERNATIONAL
 TABLE XVI - TEMPERATURE < 29 DEGREES (F.)
 0700 - 1300 (25971 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1965

NO OCCURRENCE OF DATA

1400 - 2100 (29224 OBSERVATION HOURS)

NO OCCURRENCE OF DATA

2200 - 0600 (52877 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		1										1		1
IIIA		1				1						2		2
IIIB														
IIIC														
II + III						1							1	1
III												1		1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		.5										.5		.5
IIIA		.3				1.2						1.4		1.4
IIIB														
IIIC														
II + III						1.7							1.7	1.7
III						1.2						1.2		1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		15.0	30.0									30.0		30.0
IIIA						70.0						42.5		42.5
IIIB														
IIIC														
II + III						70.0	100.0					70.0	100.0	100.0
III														70.0
FREQUENCY OF OCCURRENCE														
ALL (87672 OBSERVATION HOURS)														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		1										1		1
IIIA		1				1						2		2
IIIB														
IIIC														
II + III						1							1	1
III												1		1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		.5										.5		.5
IIIA		.3				1.2						1.4		1.4
IIIB														
IIIC														
II + III						1.7							1.7	1.7
III						1.2						1.2		1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL
TIME IN MINUTES														
II		15.0	30.0									30.0		30.0
IIIA						70.0						42.5		42.5
IIIB														
IIIC														
II + III						70.0	100.0					70.0	100.0	100.0
III														70.0

LOS ANGELES, INTERNATIONAL
 TABLE XVII - TEMPERATURE < 29 DEGREES (F.), WITH PDS, NO PRECIPITATION, AND WIND < 9 KNOTS.
 0700 - 1300 (2971 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1965

NO OCCURRENCE OF DATA

1400 - 2100 (2924 OBSERVATION HOURS)

NO OCCURRENCE OF DATA

2200 - 0600 (8277 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			1									1		1
IIIA	1	1										2		2
IIIB					1									
IIIC						1							1	1
II + III						1	1						1	1
III														1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II												.5		.5
IIIA	.9	.9										1.4		1.4
IIIB					1.2									
IIIC						1.7							1.7	1.7
II + III						1.2	1.7					1.2	1.7	1.7
III														1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II												30.0		30.0
IIIA	15.0	15.0										42.5		42.5
IIIB					70.0									
IIIC						100.0							100.0	100.0
II + III						70.0						70.0	100.0	100.0
III														70.0
ALL (8762 OBSERVATION HOURS)														
FREQUENCY OF OCCURRENCE														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II			1									1		1
IIIA	1	1										2		2
IIIB					1									
IIIC						1							1	1
II + III						1	1						1	1
III														1
TOTAL TIME IN EACH DURATION HOURS AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II												.5		.5
IIIA	.9	.9										1.4		1.4
IIIB					1.2									
IIIC						1.7							1.7	1.7
II + III						1.2	1.7					1.2	1.7	1.7
III														1.2
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II												30.0		30.0
IIIA	15.0	15.0										42.5		42.5
IIIB					70.0									
IIIC						100.0							100.0	100.0
II + III						70.0						70.0	100.0	100.0
III														70.0

LOS ANGELES, INTERNATIONAL
TABLE XVIII - TEMPERATURE < 20 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND 9-12 KNOTS.
JANUARY 1956 - DECEMBER 1965

NO OCCURRENCE OF DATA

LOS ANGELES, INTERNATIONAL
 TABLE XIX - TEMPERATURE > 32 DEGREES (F.)
 0700 - 1300 (25871 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1956

FREQUENCY OF OCCURRENCE

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	95	38	28	13	1	1	4					147	7	154
IIIA	43	20	13	5	1	1						82	1	83
IIIB	23	15	9	2	1							51		52
IIIC	2	2	1	1	1							5	1	6
II + III	7	12	5	4	3	1	4					33	3	36
III	11	7	6	3	2	3	1					29	4	33

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	9.9	16.8	17.7	11.3	3.5	5.6	9.6					97.3	13.1	110.4
IIIA	8.0	8.1	6.5	4.3	1.9							28.7	1.9	30.6
IIIB	5.0	6.4	6.0	2.0	1.4							25.7		26.2
IIIC	.4	.8	1.0			1.7						2.2	1.7	3.9
II + III	1.1	5.0	2.9	3.4	6.4	1.6	9.7					18.8	11.2	30.0
III	2.1	2.2	3.7	2.6	2.3	5.3	2.1					13.0	7.6	20.6

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	9.2	23.3	38.0	52.1	70.3	115.0	146.3					23.4	131.1	23.3
IIIA	11.1	26.2	39.3	36.2	36.0	115.0						21.0	113.0	22.1
IIIB	12.0	25.4	40.1	38.5	35.0							25.8		24.5
IIIC	11.8	24.7		58.5		100.0						26.4	100.0	33.8
II + III	9.1	25.2	34.2	31.0	77.2	93.0	143.3					34.2	134.8	47.4
III	11.6	19.1	37.2	51.3	69.3	110.7	126.0					28.8	114.3	37.5

1400 - 2100 (29224 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	44	33	18	10	13	4	3					138	11	149
IIIA	47	19	10	7	4	2	1					87	7	94
IIIB	35	9	5	7	6	2	3					62	11	73
IIIC	5	5	2	2	1	1	1					10	9	19
II + III	13	15	8	13	12	10	13	2	10	1	1	18	64	82
III	23	14	3	6	6	4	2	7	2	2	12	56	33	89

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	9.4	12.6	11.7	9.0	16.9	10.5	12.0					59.3	22.5	81.8
IIIA	8.0	7.9	6.7	6.4	6.9	7.0	3.2	4.0				32.7	18.1	50.8
IIIB	7.5	3.6	3.5	6.3	8.4	3.8	7.0		19.8	13.3		29.1	47.9	77.3
IIIC	1.9	1.2	1.2	2.9	2.9	1.8	6.8	3.3	10.7	6.9	10.5	7.0	35.7	39.9
II + III	2.2	6.0	5.0	11.4	16.8	17.4	21.5	7.0	48.8	7.6	239.0	43.3	346.2	291.3
III	4.4	5.7	1.9	7.4	8.4	10.8	9.4	7.5	35.7	19.7	141.7	27.8	218.8	244.6

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	8.8	22.8	38.9	53.7	78.2	104.7	144.2					25.9	122.6	33.0
IIIA	10.2	25.0	39.9	34.4	73.0	104.3	134.3	240.0				22.3	138.3	29.8
IIIB	12.9	23.7	41.4	34.0	83.7	112.5	139.0	296.3	397.5			28.1	261.3	65.2
IIIC	12.6		37.2	39.7	86.3	107.3	135.4	199.0	320.0	411.0	630.0	41.5	237.3	126.5
II + III	10.2	23.8	37.3	32.3	75.2	104.5	149.8	210.0	292.5	459.0	783.3	40.6	388.9	199.0
III	10.6	24.4	36.3	35.6	83.9	108.0	141.3	223.3	288.7	412.0	708.3	29.8	394.2	164.9

2200 - 0600 (32877 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	262	109	67	36	37	16	17	5	2			511	40	551
IIIA	231	86	49	22	20	16	9	2	1			408	28	436
IIIB	115	66	50	37	47	23	27	14	8	2		335	74	409
IIIC	13	12	7	6	11	6	11	6	7	1		51	31	82
II + III	40	40	29	28	49	42	36	29	41	33	13	186	216	402
III	65	43	41	20	41	37	38	23	38	18	1	210	137	347

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	43.9	43.0	43.3	33.0	44.6	29.1	42.2	16.6	11.1			297.7	90.9	388.7
IIIA	45.2	36.7	32.5	20.2	23.3	29.1	23.4	6.6	5.2			189.2	66.4	255.6
IIIB	24.4	37.5	34.3	35.3	60.7	42.3	67.9	49.5	40.0	13.5		192.2	213.3	405.3
IIIC	2.6	5.4	4.9	7.5	14.1	11.9	28.2	21.1	34.8	7.0		34.9	102.3	137.7
II + III	7.5	13.9	19.0	24.8	60.0	77.4	129.9	100.0	203.9	229.5	133.8	127.2	880.3	1007.7
III	12.9	18.0	26.6	18.3	30.3	67.1	94.1	89.2	190.2	129.2	10.9	126.2	376.6	702.6

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	10.0	23.7	38.9	35.0	72.6	109.2	148.9	199.8	331.3			24.6	148.4	33.4
IIIA	11.7	25.6	39.8	35.1	74.0	109.3	136.1	197.3	300.0			23.4	133.6	29.9
IIIB	12.0	26.2	41.2	37.2	77.5	116.9	150.8	212.3	300.0	404.0		34.4	173.8	39.6
IIIC	12.6	27.0	42.1	36.3	77.2	113.0	134.4	211.2	298.9	417.5		40.9	146.1	99.9
II + III	11.3	23.8	39.3	33.2	73.6	110.6	149.6	200.0	298.4	417.3	333.1	41.0	344.6	150.4
III	11.9	22.1	36.9	34.9	73.9	108.0	146.5	214.0	300.3	417.4	432.0	30.1	220.4	114.9

ALL (67672 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	391	180	113	59	53	23	26	5	2			766	58	824
IIIA	321	125	71	32	23	20	10	3	1			572	34	606
IIIB	173	111	65	46	54	26	30	14	19	4		431	87	518
IIIC	19	13	8	11	13	7	14	7	6	2	1	64	39	103
II + III	40	47	42	45	69	53	73	31	31	34	13	283	279	562
III	101	64	50	31	49	46	43	27	48	20	13	293	194	487

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	63.1	70.3	72.7	53.8	63.1	43.1	66.0	16.6	11.1			326.3	136.7	463.0
IIIA	61.1	32.7	47.0	29.3	25.9	36.3	26.3	10.8	3.2			219.0	75.2	294.2
IIIB	36.7	47.9	44.4	43.8	78.6	47.8	74.8	49.4	65.0	26.7		243.1	240.7	513.7
IIIC	3.0	5.9	5.8	10.3	17.1	13.0	39.2	24.3	40.4	13.8		10.9	42.7	53.6
II + III	10.8	20.9	28.8	39.6	89.2	96.4	179.1	107.0	232.7	237.1	348.8	109.3	1236.3	1488.2
III	14.5	23.9	32.2	28.3	61.1	83.9	109.6	94.6	213.9	139.0	132.0	167.0	681.0	968.0

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	301-480	481+	1-90	91-ALL	1-ALL
II	9.7	23.6	38.9	34.2	73.7	109.3	147.6	198.8	331.3			24.3	141.4	33.4
IIIA	11.0	25.8	39.7	34.9	73.8	109.0	136.0	197.7	300.0			23.0	134.8	29.6
IIIB	12.0	25.9	41.0	36.7	78.5	110.2	149.4	211.9	300.1	400.0		32.3	189.3	37.4

LOS ANGELES, INTERNATIONAL, AND WIND < 9 KNOTS.
 TABLE XX - TEMPERATURE > 32 DEGREES (F.), WITH FOG, NO PRECIPITATION, AND WIND < 9 KNOTS.
 0700 - 1300 (25571 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1965

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	65	37	27	14	3	2	3					146	5	151	
IIIA	42	20	11	5	1	1						79	1	80	
IIIB	24	15	9	2	1							31		31	
IIIC	2	1	1	1	1	1						4	1	5	
II + III	8	13	7	3	3	1	3	2				38	8	44	
III	11	7	6	4	2	3	1					30	4	34	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	9.5	23.4	38.3	52.3	70.3	120.0	130.3					23.7	10.8	68.4	
IIIA	4.8	6.4	6.0	2.0	1.4	1.9						27.1	1.9	29.0	
IIIB	4.0	5.0	4.2	1.4	1.7	1.8	6.8	6.9				20.5	2.1	21.0	
IIIC	2.1	2.2	2.0	0.3	2.3	2.5	2.1					1.8	1.7	2.9	
II + III	1.3	5.0	4.2	4.4	6.4	1.8	6.8	6.9				22.0	13.3	37.3	
III	2.1	2.2	2.0	0.3	2.3	2.5	2.1					14.0	7.8	21.6	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	11.0	24.2	38.7	54.2	90.0	115.0						20.5	115.0	21.7	
IIIA	11.9	25.5	40.1	58.3	83.0							24.1		24.7	
IIIB	11.8	27.0	38.3	28.3	100.0							27.3	100.0	35.3	
IIIC	11.1	25.8	35.7	12.4	76.2	104.4	124.7	207.0				34.7	153.3	51.1	
II + III	11.6	19.1	39.5	50.0	69.5	110.7	124.0					27.9	114.5	38.1	

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	66	36	17	7	8	5	2					134	7	141	
IIIA	46	17	10	6	4	3	2	1				83	8	89	
IIIB	34	9	5	7	6	2			2			61	12	73	
IIIC	4	2	2	2	2	1	3	1	2	1		10	8	18	
II + III	16	23	7	11	10	8	12	1	10	1	17	67	49	116	
III	25	14	3	7	6	5	5	1	7	2	12	55	32	87	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	9.9	13.7	10.8	6.5	10.4	8.7	6.3					31.3	13.0	64.9	
IIIA	7.8	7.4	3.4	3.4	4.8	3.2	3.2					31.0	14.4	45.1	
IIIB	7.3	3.6	3.5	6.3	8.4	3.8	7.0					28.8	50.2	79.4	
IIIC	0.9	1.2	1.8	2.9	1.8	1.8	6.8	3.3	11.0	6.9		7.0	28.9	35.1	
II + III	2.6	9.3	4.5	9.8	12.3	13.9	29.7	3.4	48.8	7.6	212.2	38.3	313.3	354.0	
III	4.6	5.8	1.9	6.6	8.4	8.8	12.0	4.0	35.7	13.7	136.2	27.2	208.4	235.6	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	10.2	26.2	40.0	54.8	72.3	104.3	154.3	240.0				22.4	143.8	29.0	
IIIA	12.9	23.7	41.4	54.0	83.7	112.3	139.0		305.0	397.3		28.3	290.8	65.2	
IIIB	12.6	37.3	53.7	86.3	107.5	135.4	185.0	320.0	411.0			41.3	218.8	117.5	
IIIC	10.9	24.2	34.4	33.3	73.8	104.4	148.4	202.0	292.3	453.0	749.0	34.4	380.3	183.1	
II + III	10.9	24.7	38.3	56.4	82.5	105.6	148.8	239.0	288.7	412.0	681.0	29.6	390.7	162.4	

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	265	111	64	34	35	14	15	4	2			509	35	544	
IIIA	228	81	48	21	21	15	7	2				399	25	424	
IIIB	115	87	52	33	45	24	28	12	1			334	33	407	
IIIC	14	12	6	8	11	6	12	7	7	1		31	33	64	
II + III	46	46	30	29	53	43	38	25	41	28	14	204	211	417	
III	70	46	41	22	43	37	39	28	33	16	1	222	134	376	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	44.2	44.1	41.5	31.1	41.7	25.8	28.2	13.4	11.1			202.7	88.4	291.1	
IIIA	44.3	34.7	31.7	19.3	24.8	17.0	17.9	6.4	5.3			154.3	30.8	206.6	
IIIB	24.0	37.5	30.2	33.5	38.4	44.1	70.0	42.4	40.0	6.5		189.8	203.4	397.2	
IIIC	3.0	5.4	4.2	7.5	14.1	11.2	30.8	24.4	24.8	7.2		34.9	105.6	137.2	
II + III	8.9	18.3	19.7	25.7	68.1	82.7	143.7	86.2	200.0	193.7	125.5	140.4	831.9	972.2	
III	13.6	19.3	26.6	20.2	53.7	67.1	96.1	99.3	169.2	110.6	10.9	153.3	549.4	662.7	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	10.0	23.9	38.9	54.9	71.4	110.9	132.8	200.3	331.5			23.9	131.3	32.1	
IIIA	11.7	25.7	39.6	53.1	76.6	108.1	133.6	177.3	309.0			23.3	131.4	29.2	
IIIB	12.3	25.9	41.8	57.3	77.8	110.2	130.0	211.0	300.0	390.0		34.1	148.8	58.6	
IIIC	12.7	27.1	42.3	36.3	77.2	112.3	133.3	211.1	298.3	430.0		40.6	192.3	98.3	
II + III	10.9	24.2	38.3	53.2	74.3	110.3	148.6	206.9	292.7	415.1	536.0	40.6	236.3	139.9	
III	11.6	23.2	39.0	53.0	74.9	108.9	147.9	213.2	300.3	414.8	632.0	34.0	214.0	104.9	

FREQUENCY OF OCCURRENCE		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	390	184	108	35	44	21	20	4	2			789	47	836	
IIIA	316	117	68	30	24	18	8	3	1			535	30	565	
IIIB	174	111	66	44	52	26	32	15	15	4		447	88	535	
IIIC	19	13	8	11	13	8	14	7	9	1		64	33	103	
II + III	70	82	44	43	70	34	73	28	31	29	31	311	264	577	
III	106	67	30	33	51	43	43	29	40	18	13	307	190	497	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	64.3	72.2	69.3	49.8	59.6	38.3	49.3	13.4	11.1			311.6	112.2	423.8	
IIIA	39.9	45.8	44.9	27.3	34.8	24.8	28.8	16.4	5.3			212.2	60.9	273.0	
IIIB	34.3	67.4	45.7	41.7	48.3	57.2	79.2	49.8	65.4	26.8		339.5	284.8	624.3	
IIIC	4.1	5.9	5.3	10.3	17.1	14.8	35.0	24.3	43.9	7.0		42.7	126.8	169.2	
II + III	12.9	32.4	28.4	39.9	86.7	98.4	190.2	96.3	240.0	201.3	337.8	208.8	1162.9	1363.7	
III	20.3	27.3	32.3	30.1	64.4	81.3	110.2	103.3	190.9	124.4	147.1	174.5	763.4	990.9	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS		TIME IN MINUTES													
CATEGORY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
II	11.4	25.3	39.6	54.9	76.0	108.3	136.3	211.7	309.0			23.9	133.8	28.2	
IIIA	12.9	25.6	41.3	56.8	78.8	110.2	148.6	211.2	301.0	401.3		32.1	180.8	58.6	
IIIB	12.6	27.1	41.3												

LOS ANGELES, INTERNATIONAL
 TABLE XXI - TEMPERATURE > 32 DEGREES (F.), WITH FOG, NO PRECIPITATION, AND WIND 9-12 KNOTS.
 0700 - 1300 (25571 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1965

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	3	1															
IIIA	2											2					2
IIIB																	
IIIC			1														1
II + III	3	1															4
III			1														2

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	.4	.2															.9
IIIA	.5																.5
IIIB																	
IIIC			.3														.3
II + III	.4	.2	.3														.7
III			.3														.3

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	7.0	30.0															12.8
IIIA	29.0																15.0
IIIB																	
IIIC			20.0														20.0
II + III	7.0	20.0															10.3
III			20.0														20.0

1400 - 2100 (29224 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	12	5	4	4													25
IIIA	5	3	1	2													11
IIIB																	
IIIC																	
II + III	13	8	4	4	1												30
III	4	2	1														7

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	2.0	1.8	2.7	3.5													10.0
IIIA	1.0	1.5	.5	1.8													4.3
IIIB																	
IIIC																	
II + III	2.1	3.2	2.7	3.6	1.1												12.7
III	.8	1.0	.9														2.7

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	9.8	21.6	40.3	52.0													23.9
IIIA	11.8	29.7	31.0	52.5													23.5
IIIB																	
IIIC																	
II + III	9.7	24.0	40.3	54.3	65.0												25.4
III	12.0	30.0		55.0													23.3

2200 - 0600 (32877 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	3	3				1											6
IIIA	2	3															6
IIIB	3	2															5
IIIC					1												1
II + III	6	4	1	1	1	1											14
III	4	2	1	1	1	1											9

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	.6	1.3															1.8
IIIA	.4	1.1				1.3											2.7
IIIB	.6	1.0															1.6
IIIC					1.0												1.0
II + III	1.2	1.5	.7	1.0	1.3	1.8											5.1
III	.9	.7	.8	1.0	1.8												3.3

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	11.0	25.3															18.2
IIIA	13.0	22.7			75.0												27.3
IIIB	12.7	30.0															19.6
IIIC					60.0												60.0
II + III	11.8	23.0	41.0	60.0	79.0	105.0											31.7
III	13.3	21.0	43.0	60.0		105.0											23.9

ALL (87672 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	18	9	4	4													35
IIIA	7	5	1	2	1												16
IIIB	3	3															5
IIIC		1		1													2
II + III	22	13	5	5	2	1											48
III	8	5	1	2	1	1											17

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	2.9	3.6	2.7	3.3													12.0
IIIA	1.5	2.1	.5	1.8	1.3												6.6
IIIB	.8	1.0															1.8
IIIC		.3		1.0													1.3
II + III	3.6	5.1	3.4	4.6	2.3	1.8											20.8
III	1.7	2.0	.8	1.9	1.8	1.8											6.1

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL			
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480							
II	9.5	23.8	40.3	52.0													21.7
IIIA	12.9	28.0	31.0	52.8	79.0												24.6
IIIB	12.7	30.0															19.6
IIIC		20.0		60.0													40.0
II + III	9.9	23.4	40.4	55.4	70.0	105.0											26.0
III	12.8	24.4	45.3	57.5		105.0											23.7

11.20

<p>UNCLASSIFIED</p> <p>I. Environmental Science Services Administration Contract No. FA-67-WAI-129 II. Project No. 197-641-01R III. Report No. RD 69-22</p> <p><u>Descriptors</u></p> <p>Climatology All-Weather Aviation Landing Systems Fog Dissipation</p> <p>UNCLASSIFIED</p>	<p>Systems Research and Development Service, Federal Aviation Administration, Washington, D. C., CLIMATOLOGICAL SUMMARIES, VISIBILITIES BELOW 1/2 MILE AND CEILINGS BELOW 200 FEET, by ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION, FINAL REPORT, June 1969, 41 volumes of 29 pages each. (Contract No. FA-67-WAI-129, Project 197-641-01R, Report No. RD-69-22)</p> <p>Unclassified Report</p> <p>This report consists of 41 volumes of climatological data for 41 different major airports. Ceiling, visibility, wind, and weather information are grouped by various periods of the day and by various temperature and wind categories. Various weather and landing system categories are tabulated, in most cases from 10 years of data, as aids for making decisions affecting landing systems and fog dissipation at these 41 air terminals.</p>	<p>UNCLASSIFIED</p> <p>I. Environmental Science Services Administration Contract No. FA-67-WAI-129 II. Project No. 197-641-01R III. Report No. RD 69-22</p> <p><u>Descriptors</u></p> <p>Climatology All-Weather Aviation Landing Systems Fog Dissipation</p> <p>UNCLASSIFIED</p>	<p>Systems Research and Development Service, Federal Aviation Administration, Washington, D. C., CLIMATOLOGICAL SUMMARIES, VISIBILITIES BELOW 1/2 MILE AND CEILINGS BELOW 200 FEET, by ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION, FINAL REPORT, June 1969, 41 volumes of 29 pages each. (Contract No. FA-67-WAI-129, Project 197-641-01R, Report No. RD-69-22)</p> <p>Unclassified Report</p> <p>This report consists of 41 volumes of climatological data for 41 different major airports. Ceiling, visibility, wind, and weather information are grouped by various periods of the day and by various temperature and wind categories. Various weather and landing system categories are tabulated, in most cases from 10 years of data, as aids for making decisions affecting landing systems and fog dissipation at these 41 air terminals.</p>
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