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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 1

**ANCHORAGE, ALASKA
INTERNATIONAL AIRPORT**

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JUNE 1969

This report has been approved for unlimited availability.

Prepared for
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Systems Research & Development Service

by

U.S. DEPARTMENT OF COMMERCE
Environmental Science Services Administration
ENVIRONMENTAL DATA SERVICE
NATIONAL WEATHER RECORDS CENTER

Asheville, N.C.

FINAL REPORT

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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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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

ANCHORAGE, ALASKA INTERNATIONAL AIRPORT

Although located near sea level on the southern coast of the Alaskan mainland, Anchorage enjoys a relatively dry climate because it is situated at the northeast end of Cook Inlet and is protected from Gulf of Alaska storms by the Chugach Mountain Range, which rises abruptly to an elevation of 4,000 to 5,000 feet less than 10 miles east and southeast of the airport. The mighty Alaska Mountain Range, with an average elevation of 8,000 to 10,000 feet and with peaks above 18,000 feet (Mt. McKinley 20,300), lies in a long arc from southwest through northwest to northeast, approximately 100 miles distant from Anchorage.

Cook Inlet divides into two arms at Anchorage, with Turnagain Arm extending roughly 45 miles east-southeastward to Portage, and Knik Arm extending north-northeastward 18 miles, then east-northeastward an additional 12 miles to the mouth of the Knik River. The surface water temperature in the Upper Inlet varies from 31° F. in midwinter (considerable floating ice is present) to about 50° in late summer.

The fog season begins about October 10 and ends in early March. Visibilities in the fog are generally less than a mile and frequently less than 1/2 mile. Fog associated with surface temperatures near or above freezing ("warm air" fog) is the most common type during the early (October 10 to about November 10) fog season. In most cases such warm air fog forms following a period of precipitation, usually within 6 to 12 hours after the precipitation ends. After November 10, fog is normally associated with surface temperatures colder than 25° F. and is termed "cold air" fog; this type of fog is usually associated with light low level winds and relatively dry air aloft. A light flow of cold continental air over the airport from any quadrant except east has had some over-water travel. The height of the fog layer top varies from 70 feet to as much as 2000 feet; although the average is between 500 and 1000 feet.

The tables in this publication are based on the period January 1, 1956-December 31, 1965. Celiometer measurements of ceiling height were made for the entire period. Transmissometer (500 ft. baseline) was commissioned on runway 06 August 17, 1956, relocated November 2, 1960. 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	3- 2-61	61° 10'	149° 50'	41	90
3- 3-61	3-27-64	61° 10'	149° 59'	22	90
3-28-64	12-31-65	61° 10'	150° 01'	22	114

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 transmissionometer readings etc.

This information has not often been recorded with the transmissionometer 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:

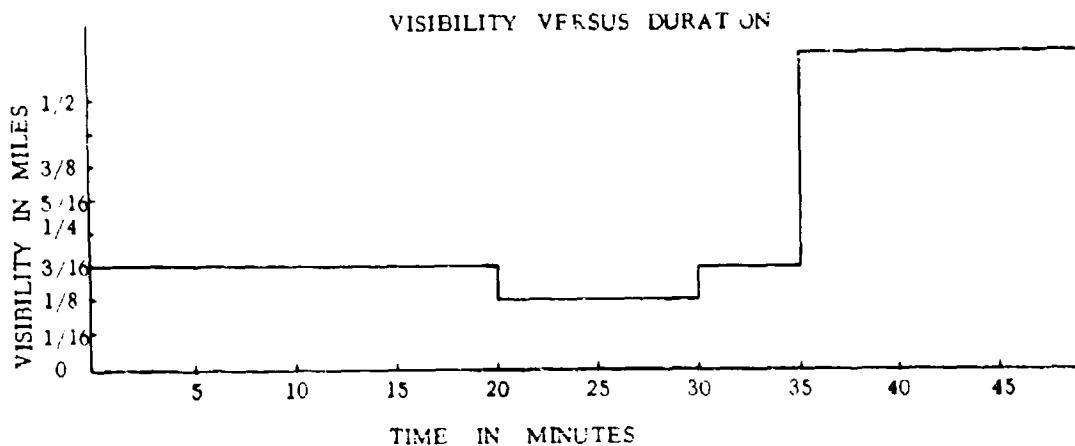
Los Angeles International, Oakland International, Chicago O'Hare, San Francisco International, Greater Buffalo International, Washington National, Washington Dulles International, Atlanta, Newark, New York J. F. K., Philadelphia International, New York La Guardia, Cleveland Hopkins International

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, 3/16, 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 14×23 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 overestimated 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 (WBAN). Circular N, Weather Bureau, Washington, D. C. NAVAIR 501D305, 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:	Visibility = 1/2 and ceiling = 100
	Visibility = 3/8 and ceiling ≠ 0
	Visibility = 5/16 and ceiling ≠ 0
	Visibility = 1/4 and ceiling ≠ 0
Category III-a:	Visibility = 1/4 and ceiling = 0
	Visibility = 3/16 and all ceilings
	Visibility = 1/8 and all ceilings
Category III-b/c:	Visibility = 1/16 and all ceilings
	Visibility = 0 and all ceilings
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 S		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

ANCHORAGE - INTERNATIONAL
FREQUENCY OF INDIVIDUAL 10-MINUTE SPANS CATEGORIZED BY VISIBILITY

JANUARY 1956 - DECEMBER 1965

TABLE VI. VISIBILITY P.L. 62 MIL. WHEN CEILING > 200 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	120	20	6	6	1	1	1	1	1	1	1
5/16	35	49	10	7	9	3	1	1	1	1	1
1/4	355	196	66	62	42	17	15	6	3	1	1
3/16	81	60	23	15	10	6	2	1	1	1	1
1/8	161	128	51	34	42	25	20	10	3	1	1
1/16	37	32	23	11	7	8	2	3	1	1	1
0	7	3	6	1	1	1	1	1	1	1	1

TABLE VII. 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	1	1	1	1	1	1	1	1	1	1	1
5/16	3	3	3	3	3	3	3	3	3	3	3
1/4	11	19	4	4	4	4	4	4	4	4	4
3/16	10	5	2	2	2	2	2	2	2	2	2
1/8	28	19	11	5	7	3	3	3	3	3	3
1/16	15	5	6	4	4	1	1	1	1	1	1
0	3	1	2	1	1	1	1	1	1	1	1

TABLE VIII. 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	1	1	1	1	1	1	1	1	1	1	1
5/16	6	3	2	1	1	1	1	1	1	1	1
1/4	2	1	1	1	1	1	1	1	1	1	1
3/16	14	9	4	3	1	1	2	1	1	1	1
1/8	14	8	11	3	6	1	1	1	1	1	1
1/16	5	4	4	2	2	1	1	1	1	1	1
0	4	1	2	1	1	1	1	1	1	1	1

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	1	1	1	1	1	1	1	1	1	1
5/16	7	6	3	1	1	1	1	1	1	1	1
1/4	35	22	7	3	8	1	1	1	1	1	1
3/16	12	9	3	3	1	1	2	1	1	1	1
1/8	36	24	15	2	8	7	3	1	1	1	1
1/16	14	8	11	3	6	1	1	1	1	1	1
0	9	1	2	1	1	1	1	1	1	1	1

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSED AS ONE INCIDENT

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	122	132	108	61	102	61	77	34	33	11	7
5/16	120	110	6	62	94	91	74	37	28	10	7
1/4	108	112	58	57	91	94	69	35	29	9	6
3/16	77	77	55	35	91	43	36	26	15	5	2
1/8	62	76	52	31	42	54	32	21	8	4	1
1/16	23	17	19	8	19	9	2	5	1	1	1
0	9	1	2	1	1	1	1	1	1	1	1

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSED AS ONE INCIDENT

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	29	23	9	19	11	8	2	1	1	1	1
5/16	38	23	23	10	18	11	6	2	1	1	1
1/4	39	20	21	9	17	13	4	2	1	1	1
3/16	31	17	19	9	13	11	3	1	1	1	1
1/8	27	17	13	6	12	9	3	2	1	1	1
1/16	11	6	6	1	3	2	1	1	1	1	1
0	1	1	2	1	1	1	1	1	1	1	1

TOTAL TIME AT OR BELOW EACH VISIBILITY CLASSED AS ONE INCIDENT

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	36	29	21	16	22	18	9	3	1	1	1
5/16	35	27	22	16	21	18	9	3	1	1	1
1/4	35	24	26	15	20	21	8	3	1	1	1
3/16	31	18	18	13	15	18	6	1	1	1	1
1/8	28	17	17	9	15	15	5	3	2	1	1
1/16	16	7	16	3	6	2	1	1	1	1	1
0	5	1	2	1	1	1	1	1	1	1	1

ANCHORAGE, INTERNATIONAL

FREQUENCY OF INTERVALS OF DURATION VERSUS CATEGORIES OF VISIBILITIES JANUARY 1950 - DECEMBER 1968

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

	DURATION IN MINUTES										
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
66	39	17	7	9	3	1					
67											

TABLE II. (IRRESPECTIVE OF CEILING).

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	138	58	20	11	6	1					
5/16	94	49	19	2	9	2					
1/4	355	196	89	42	42	17	19	4	3	1	
3/16	81	48	23	15	10	6					
1/8	191	120	53	34	42	29	-20	10	1	3	
1/16	32	27	26	11	16	8	2	3	1		
0	7	3	4								

TABLE III. (CEILING 100 FEET).

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	3	2									
5/16	7	3									
1/4	31	18	5	3							
3/16	10	5	2	1							
1/8	28	19	11	8	7	6	6	1			
1/16	19	9	6	3	2	1					
0	1										

TABLE IV. (CEILING ZERO).

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	1	1									
5/16	6	3	2								
1/4	2	1	1	3							
3/16	14	9	6	3	1	2	1				
1/8	5	4	4	3	2	1					
1/16	6	1	2								
0											

TABLE V. (CEILING 100 FEET OR ZERO).

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	4	4									
5/16	7	4	3	1							
1/4	35	22	7	3	6						
3/16	12	5	3	3	1	2					
1/8	36	24	15	2	9	7	3	1			
1/16	18	8	11	3	6	1					
0	5	1	2								

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

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	162	125	108	61	102	61	77	36	35	11	7
5/16	120	130	95	60	94	93	76	37	28	10	7
1/4	100	112	90	97	91	84	69	35	28	9	6
3/16	77	77	56	38	51	43	36	26	19	6	2
1/8	68	76	52	31	42	39	32	21	8	4	1
1/16	23	17	19	8	19	9	2	9	1		
0	6	3	2								

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

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	38	29	23	9	19	11	6	2			
5/16	36	23	23	10	18	11	6	2			
1/4	39	20	21	9	17	13	4	2			
3/16	31	17	15	9	13	11	1				
1/8	27	17	13	6	12	8	1	2			
1/16	11	4	6	1	9	2					
0	1										

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

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

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

	DURATION IN MINUTES										
VISIBILITY	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+
3/8	36	29	21	16	22	10	9	3			
5/16	35	27	22	16	21	10	9	3			
1/4	39	26	20	15	20	21	6	3			
3/16	31	18	18	13	19	10	6	1			
1/8	28	17	17	9	19	15	3	2			
1/16	16	7	10	3	6	2	1				
0	9	1	2								

TABLE X

ANCHORAGE, INTERNATIONAL

ALL SEASONS

ALL HOURS

JANUARY 1956 - DECEMBER 1965

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES												I-ALL	I-90	91-ALL	I-ALL	
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+						
II	629	269	141	71	67	26	23	7	9	1	937	61	1039				
IIIA	169	142	67	91	95	34	27	10	9	3	486	79	963				
IIIB/C	37	28	26	7	19	9	2	3	1	1	117	16	133				
II + III	161	186	114	66	101	60	81	39	34	12	7	600	233	833			
III	113	109	72	93	60	93	32	20	11	5	1	407	120	527			

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES												I-ALL	I-90	91-ALL	I-ALL	
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+						
II	69.7	102.3	88.0	62.7	81.0	46.2	56.8	29.7	23.3	6.2	403.7	151.9	555.6	.46	.17	.63	
IIIA	30.1	54.8	42.3	49.3	88.0	39.6	67.2	36.1	22.0	19.9	260.9	203.8	244.3	.27	.23	.51	
IIIB/C	7.0	11.2	16.5	6.3	23.7	15.6	5.0	9.8	4.8	7.8	65.1	43.1	108.2	.07	.05	.12	
II + III	27.9	59.3	73.9	58.8	122.3	103.9	197.0	138.1	165.1	86.2	77.6	362.1	766.0	1108.0	.39	.87	1.26
III	20.4	41.2	45.4	47.2	74.5	91.6	79.9	70.2	53.5	19.9	9.1	228.6	323.8	552.4	.26	.37	.63

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES												I-ALL	I-90	91-ALL	I-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+					
II	9.0	22.7	37.3	53.0	72.6	101.9	192.3	203.6	279.6	372.0	24.0	167.0	321			
IIIA	10.7	23.2	37.9	53.3	74.2	103.4	199.4	216.6	263.6	398.3	29.0	154.7	47.3			
IIIB/C	12.2	23.9	38.0	53.7	76.8	104.0	149.5	196.7	290.0	448.0	33.4	161.6	48.8			
II + III	10.4	22.6	38.2	53.5	72.6	103.9	145.9	209.6	291.6	430.9	665.3	34.2	197.2	79.8		
III	10.8	22.7	37.8	53.4	74.3	103.7	149.1	210.7	291.5	398.3	545.0	33.7	161.9	62.9		

TOTAL OBSERVATION HOURS 87672

ANCHORAGE, INTERNATIONAL

NO WIND TABLES FOR THIS STATION

ANCHORAGE, INTERNATIONAL																		
TABLE III - ALL CONDITIONS.		0700 - 1300 (23571 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	106	97	49	18	24	3	3	2	1	1	481+	352	10	362				
IIIA	98	91	20	10	19	4	5	2				154	16	170				
IIIB	12	14	11	3	3	2	1	1				43	4	47				
IIIC	2	1	1									3		3				
III + III	76	93	35	19	36	19	17	10	7	2	1	217	30	267				
III	37	36	20	11	19	18	6	4	1			123	29	192				
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				
II	26.0	36.7	30.3	16.1	29.8	5.2	6.3	7.3	4.0	0.2		138.9	39.9	168.0				
IIIA	10.1	19.3	12.4	9.1	18.0	15.8	12.0	6.9				67.6	34.3	100.1				
IIIB	2.1	5.9	6.7	2.7	3.5	3.4	2.0	9.0				21.0	9.2	30.3				
IIIC	.2	.6										.7		.7				
III + III	12.6	20.4	22.7	17.1	43.6	22.6	61.2	39.7	32.7	19.4	19.3	116.4	160.9	277.3				
III	6.9	13.9	12.2	10.0	22.9	31.3	19.4	18.8	9.6			69.9	64.8	190.7				
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				
II	9.3	22.7	37.1	33.6	76.8	104.7	130.7	220.0	277.0	372.0		23.7	179.8	28.0				
IIIA	10.4	22.9	37.2	33.8	71.9	105.6	144.0	193.9				26.2	128.6	33.3				
IIIB	10.4	29.2	36.3	33.3	70.0	102.3	167.0	182.0				29.3	138.8	38.6				
IIIC	.6	4.5										16.0		16.6				
III + III	10.2	23.1	38.9	34.0	72.8	104.6	149.3	202.2	280.1	481.0	481.0	920.0	32.2	193.0	62.3			
III	11.1	23.1	36.7	34.3	72.4	104.2	139.9	190.1	339.0			72.1	134.1	91.6				
1400 - 2100 (29224 OBSERVATION HOURS)																		
FREQUENCY OF OCCURRENCE	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL				
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	57	56	26	18	18	9	7	4	4	4		173	74	187				
IIIA	26	23	11	8	9	6	9	1				77	19	86				
IIIB	9	7	4	2	2							24		24				
IIIC	1	1										1		1				
III + III	33	31	26	16	16	15	16	5	8	5	9	120	81	171				
III	22	19	11	7	7	4	9	3	1	3	1	66	21	87				
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				
II	8.8	20.6	16.1	15.9	21.0	19.1	16.8	19.4	20.9			82.3	65.9	148.2				
IIIA	6.0	8.9	6.8	7.1	10.8	10.5	23.8	9.7				37.7	36.4	91.3				
IIIB	2.1	2.6	3.0	1.7	2.7							11.8		11.8				
IIIC	.3	.7										1.1		1.1				
III + III	9.3	11.9	16.4	12.3	18.2	20.0	34.6	17.9	39.3	36.7	45.3	64.2	199.7	263.9				
III	4.2	7.1	7.0	6.2	6.2	6.0	22.0	16.1	4.6			32.7	71.7	104.3				
AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS																		
CATEGORY	1-5	10-30	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	22.9	37.2	32.9	70.1	100.9	140.1	201.3	307.3			28.6	104.7	45.1				
IIIA	11.1	23.3	37.2	33.0	72.0	104.7	152.1	223.0				29.0	178.1	37.2				
IIIB	13.8	22.0	44.3	52.0	80.0							34.9		29.3				
IIIC	15.0	43.5										34.0		34.0				
III + III	10.1	22.9	37.9	32.5	88.1	103.9	148.1	214.8	296.6	460.2	679.3	32.1	234.9	92.0				
III	11.4	22.3	38.2	32.9	70.1	101.9	146.6	202.0	307.7	530.0		29.7	204.7	71.9				
3200 - 0000 (32877 OBSERVATION HOURS)																		
FREQUENCY OF OCCURRENCE	TIME IN MINUTES										481+	1-90	91-ALL	1-ALL				
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	129	125	74	38	33	19	21	9	6			429	59	492				
IIIA	58	63	25	25	20	16	10	7	1			191	36	229				
IIIB	14	12	12	6	11	6	1	2	1			55	10	69				
IIIC	1	1										4	1	3				
III + III	56	72	95	33	47	32	50	26	19	5	2	203	128	375				
III	45	45	31	24	24	29	13	8	4			169	36	289				
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				
II	28.3	33.1	48.6	33.9	40.0	32.0	55.4	30.2	17.1			197.0	128.6	323.6				
IIIA	11.0	23.2	15.9	22.3	25.9	27.6	23.9	24.6	4.2			98.8	79.9	176.0				
IIIB	5.1	4.6	7.7	3.4	13.4	10.3	3.2	7.8	4.7			34.3	23.9	57.6				
IIIC	.2	.8	.7									1.5	0.6	0.8				
III + III	9.7	27.0	36.7	29.5	60.5	55.4	121.3	64.3	93.2	34.1	17.0	161.5	409.4	386.9				
III	8.3	17.9	19.5	21.3	29.9	49.8	38.8	28.2	19.8			96.8	133.6	230.4				
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				
II	10.0	22.9	37.5	33.6	51.4	52.3	55.6	34.9	42.2	19.4			201.2	166.4	363.2			
IIIA	10.9	23.8	37.6	33.9	73.5	104.3	146.3	209.6	232.6	307.7			29.0	149.8	45.2			
IIIB	12.6	22.6	38.3	34.0	73.3	102.7	132.0	204.0	280.0				37.4	143.6	56.8			
IIIC	12.0	24.3	42.0										23.2	200.0	57.9			
III + III	10.8	22.3	37.9	33.6	74.1	103.8	148.3	211.3	296.2	409.6	910.0		36.8	189.3	86.1			
III	11.1	23.9	37.7	33.1	74.7	103.1	149.1	211.3	296.8			36.4	143.1	61.4				

ANCHORAGE, INTERNATIONAL
TABLE XIII - TEMPERATURE < 33 DEGREES (F),
0700 - 1900 (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	481+	481+				
I	145	79	40	17	21	2	3	2	1			302	8	310		
IIIA	33	47	20	8	14	5	5	2				142	10	198		
IIIB	12	13	8	3	3	2	1	1				39	4	43		
IIIC	2	1										3		3		
II + III	62	40	30	18	32	18	17	8	8		1	182	47	229		
III	33	38	19	10	18	17	9	6	1			113	27	140		

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	481+	481+				
I	22.9	29.6	19.9	15.2	25.7	3.9	6.3	7.3	4.6			110.3	22.0	160.2		
IIIA	9.2	18.0	12.4	7.2	16.6	19.8	18.0	6.3				61.9	34.3	96.6		
IIIB	2.1	9.5	4.8	2.7	3.5	3.4	2.8	3.0				18.7	9.2	28.0		
IIIC	.2											.7		.7		
II + III	10.5	19.4	19.5	16.4	38.8	22.6	41.2	27.3	36.9			19.9	100.6	143.3	243.9	
III	6.2	12.6	11.7	9.0	21.6	29.7	18.7	12.6	9.6			61.3	60.5	121.8		

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	481+	481+				
I	9.3	22.3	37.6	53.7	73.3	106.0	180.7	220.0	277.0			23.9	166.0	27.1		
IIIA	10.5	23.0	37.2	56.0	71.3	105.6	164.0	191.5				26.1	128.6	39.0		
IIIB	10.6	25.2	35.9	53.8	70.0	102.9	167.0	182.0				28.0	138.5	30.0		
IIIC	.6											16.6		16.6		
II + III	10.2	23.0	39.0	54.6	72.8	104.4	148.3	204.8	276.8			920.0	33.2	193.0	63.9	
III	11.2	23.3	37.0	54.0	71.9	104.6	152.0	199.3	335.0			32.5	134.3	52.2		

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	481+	481+				
I	52	40	26	17	18	8	6	9	1			161	18	179		
IIIA	22	23	31	8	6	6	8	1				72	18	90		
IIIB	8	0	4	2	2							22		22		
IIIC	1		1									2		2		
II + III	29	26	26	15	16	14	14	9	6			112	46	198		
III	20	19	31	7	6	9	9	3	1			63	22	85		

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	481+	481+				
I	8.1	18.6	18.1	15.1	20.8	13.9	14.3	10.3	5.9			78.4	43.3	182.0		
IIIA	6.0	8.9	8.8	7.1	9.6	10.5	20.9	9.7				39.7	33.9	60.7		
IIIB	1.9	2.3	3.0	1.7	2.7							11.6		11.6		
IIIC	.3											1.1		1.1		
II + III	4.9	9.9	18.4	13.2	18.0	24.6	34.5	17.9	29.4			35.9	62.6	171.8	233.9	
III	3.9	7.1	7.0	6.2	7.0	8.4	22.0	10.1	4.6			8.8	31.2	78.8	104.4	

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	481+	481+				
I	9.3	23.0	37.2	53.1	69.4	101.1	142.9	205.7	327.0			59.2	149.1	40.9		
IIIA	11.0	23.2	37.2	53.0	71.9	104.7	192.3	223.0				29.8	179.0	59.1		
IIIB	16.5	22.5	44.3	52.0	80.0							31.0		31.0		
IIIC	15.0	43.5										36.0		36.0		
II + III	10.1	22.9	37.9	52.9	67.3	105.2	147.8	214.8	294.2	438.0		717.7	33.6	233.7	68.8	
III	11.7	22.5	38.2	52.9	69.7	100.8	146.6	202.0	279.0	387.7		930.0	29.7	199.9	79.7	

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	481+	481+				
I	22.9	37.6	38.1	26.8	33.0	33.7	38.0	23.5	12.7			198.2	107.8	266.1		
IIIA	8.6	19.8	15.2	15.3	22.6	24.5	18.2	21.8	6.8			80.5	66.0	146.0		
IIIB	2.6	0.0	0.6	4.6	12.0	6.8	2.2	6.8	4.7			29.8	26.2	31.0		
IIIC	1.2	1.6	0.7									1.1	0.6	0.2		
II + III	7.0	20.9	27.0	23.2	48.9	48.3	93.9	67.3	70.2			34.1	206.0	62.5		
III	6.2	14.1	17.5	14.5	27.5	49.8	25.4	24.7	19.8			70.6	111.1	190.7		

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	481+						

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TABLE XIV - TEMPERATURE < 33 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND < 8 KNOTS,
0700 - 1300 (23571 OBSERVATION HOURS) JANUARY 1950 - DECEMBER 1965

TIME IN MINUTES											
CATEGORY			1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360
II	119	66	38	12	15	2	1	2	1	2	1
IIIA	47	66	17	3	12	10	4	2	1	2	1
IIIB	8	12	7	3	3	3	1	1	1	3	1
IIIC	2	1	1	1	1	1	1	1	1	1	1
II + III	46	32	28	14	26	12	13	6	6	1	1
III	29	36	15	9	15	17	4	4	1	102	26

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
II	18.1	24.3	22.4	10.7	18.9	3.7	2.3	7.3	4.6	93.9	17.9
IIIA	8.2	17.7	10.9	9.9	14.6	17.8	9.9	6.5	19.3	36.1	36.2
IIIB	1.3	4.9	4.1	2.7	3.9	9.0	3.0	1.6	1.6	8.1	34.7
IIIC	.2	.8	.2	.1	.1	.1	.1	.1	.1	.1	.1
II + III	7.5	12.6	18.3	12.9	31.9	20.9	32.8	20.0	28.5	19.3	83.1
III	5.2	13.1	9.1	8.0	18.2	29.3	9.9	12.6	9.6	53.6	97.6

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
II	9.1	22.8	37.6	93.6	73.7	111.0	137.0	220.0	277.0	22.9	179.3
IIIA	10.5	23.1	37.1	92.6	71.6	107.0	148.3	193.3	235.6	129.1	36.4
IIIB	9.6	24.6	36.7	93.3	70.0	100.7	182.0	190.2	121.0	40.0	16.3
IIIC	8.7	45.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
II + III	9.7	23.6	39.3	99.1	73.7	104.7	191.2	200.0	284.9	920.0	94.2
III	10.0	23.1	36.3	93.3	72.7	104.1	148.3	189.3	339.0	31.9	132.8

1400 - 2100 (29224 OBSERVATION HOURS)

TIME IN MINUTES											
CATEGORY			1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360
II	39	46	21	17	16	7	7	3	1	191	17
IIIA	22	18	9	8	10	5	7	1	1	67	16
IIIB	8	6	2	2	2	1	1	1	1	22	2
IIIC	1	1	1	1	1	1	1	1	1	1	1
II + III	16	23	20	15	17	14	18	8	8	8	47
III	19	19	9	7	9	4	8	3	1	59	20

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
II	5.4	10.5	13.9	15.0	18.8	11.6	10.9	9.9	6.8	39.9	38.5
IIIA	3.9	6.9	9.5	7.0	12.3	8.9	17.4	3.7	19.4	34.9	49.4
IIIB	1.9	2.3	3.0	1.7	2.7	1.2	1.2	1.2	1.2	11.4	11.4
IIIC	.3	.7	.2	.1	.1	.1	.1	.1	.1	1.1	1.1
II + III	2.0	8.4	12.9	13.2	19.8	24.2	40.2	21.9	24.8	34.9	50.8
III	3.6	5.6	3.8	6.2	11.0	6.8	19.1	6.6	19.4	8.8	31.9

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
II	9.7	22.3	38.0	92.8	70.4	101.0	145.1	196.0	31.9	135.9	43.3
IIIA	10.7	22.8	36.4	52.8	73.7	106.8	149.1	223.0	387.7	31.2	185.3
IIIB	14.5	22.5	66.3	52.0	80.0	1.2	1.2	1.2	1.2	31.0	34.0
IIIC	15.0	43.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
II + III	10.9	22.0	38.7	52.6	69.9	103.9	130.7	218.3	297.6	430.7	687.3
III	11.3	22.3	37.6	52.9	73.1	101.3	149.1	202.0	273.0	387.7	930.0

2200 - 0600 (32877 OBSERVATION HOURS)

TIME IN MINUTES											
CATEGORY			1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360
II	110	91	47	28	22	19	13	6	1	290	40
IIIA	42	47	24	16	19	13	7	4	1	164	25
IIIB	10	10	11	4	10	4	1	2	1	43	8
IIIC	1	1	1	1	1	1	1	1	1	1	1
II + III	95	94	62	29	30	28	38	19	12	3	100
III	30	33	29	15	20	24	9	3	6	127	42

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
II	19.9	34.6	30.2	26.7	27.1	31.9	31.7	20.2	8.7	136.6	220.9
IIIA	8.2	19.0	15.3	14.3	19.8	22.6	16.2	14.2	4.2	74.3	97.3
IIIB	2.1	4.0	7.2	3.7	12.0	6.6	2.2	6.4	0.7	29.1	19.9
IIIC	.2	.4	.7	.1	.1	.1	.1	.1	.1	1.1	6.2
II + III	6.9	20.3	26.7	20.3	37.9	48.3	67.1	61.2	19.3	170.0	410.4
III	5.7	19.3	18.3	13.6	26.7	41.4	21.1	17.3	19.8	75.3	193.0

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
II	262	199	104	57	53	28	21	11	9	673	62
IIIA	110	110	48	28	35	27	16	7	1	391	30
IIIB	27	26	23	9	15	7	1	2	1	102	12
IIIC	1	1	2	1	1	1	1	1	1	0	7
II + III	95	109	90	52	73	34	65	21	6	417	102
III	78	82	93	31	44	49	21	12	6	208	80

TABLE XV - TEMPERATURE < 33 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND 9-12 KNOTS.
0700 - 1300 (23971 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1969

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

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+		
II	.3	.3									.0	.0	.0
IIIA	.1										.1	.1	.1
IIIB													
IIIC													
II + III	.3	.3									.0	.0	.0
III													

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+		
II	8.7	18.0									8.8	8.8	8.8
IIIA	7.0										7.0	7.0	7.0
IIIB													
IIIC													
II + III	8.7	18.0									8.8	8.8	8.8
III													

FREQUENCY OF OCCURRENCE											1400 - 2100 (29824 OBSERVATION HOURS)		
TIME IN MINUTES											CATEGORY		
III	1										1-90	91-ALL	1-ALL
IIIA	1										1	1	1
IIIB													
IIIC													
II + III	1										1	1	1
III													

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+		
II	.1										.1	.1	.1
IIIA	.1										.1	.1	.1
IIIB													
IIIC													
II + III	.1										.1	.1	.1
III													

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+		
II	5.0										5.0	5.0	5.0
IIIA	5.0										5.0	5.0	5.0
IIIB													
IIIC													
II + III	5.0										5.0	5.0	5.0
III													

FREQUENCY OF OCCURRENCE											2200 - 0600 (32877 OBSERVATION HOURS)		
TIME IN MINUTES											CATEGORY		
III	1	1									2	2	2
IIIA	1										1	1	1
IIIB													
IIIC													
II + III	1	1									2	2	2
III													

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+		
II	.1	.5									.0	.0	.0
IIIA	.1										.1	.1	.1
IIIB													
IIIC													
II + III	.1	.5									.0	.0	.0
III													

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+		
II	7.0	31.0									19.0	19.0	19.0
IIIA	7.0	31.0									7.0	7.0	7.0
IIIB													
IIIC													
II + III	7.0	31.0									19.0	19.0	19.0
III													

FREQUENCY OF OCCURRENCE											ALL (87678 OBSERVATION HOURS)		
TIME IN MINUTES											CATEGORY		
III	.9	1	1								7	7	7
IIIA	1										1	1	1
IIIB													
IIIC													
II + III	.9	1	1								7	7	7
III													

TOTAL TIME IN EACH DURATION HOURS AND TENTHS											TIME IN MINUTES		
CATEGORY											1-15 16-30 31-45 46-60 61-90 91-120 121-180 181-240 241-3		

TABLE XVI - TEMPERATURE < 29 DEGREES (F). ANCHORAGE, INTERNATIONAL
0700 - 1900 (29371 OBSERVATION HOURS) JANUARY 1956 - DECEMBER 1969

TIME IN MINUTES													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	140	74	34	13	15	2	3	1	1	276	7	293	
III A	50	46	20	7	9	8	9	2	1	132	15	147	
III B	12	13	8	3	2	1	1	1	1	36	3	41	
III C	2	1	1	1	1	1	1	1	1	3	3	3	
II + III	59	40	26	16	23	13	17	8	9	1	164	44	208
III	32	33	19	10	14	14	9	4	1	108	24	172	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	22.1	27.6	21.2	11.6	18.1	3.5	6.5	3.0	4.0	100.3	10.5	119.0	
III A	8.7	17.7	12.6	6.2	10.4	1.6	12.0	6.5	9.3	94.3	32.3	85.2	
III B	2.1	5.3	4.0	2.7	2.6	1.7	2.8	3.0	1.7	11.7	7.5	29.2	
III C	.2	.0	.0	.0	.0	.0	.0	.0	.0	.7	.7	.7	
II + III	10.0	15.3	16.9	14.7	27.9	22.6	61.2	27.3	23.8	19.3	84.9	129.9	214.4
III	6.0	12.8	11.7	9.0	16.7	24.4	12.7	12.6	9.6	36.1	59.3	111.4	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	9.3	22.3	37.6	33.3	72.3	10.6	15.0	23.0	27.7	21.0	190.0	29.2	
III A	10.4	23.2	37.2	33.4	69.0	10.9	16.0	19.9	24.7	22.0	129.0	34.8	
III B	10.6	23.2	33.9	33.3	73.0	10.2	16.7	20.0	27.9	150.0	36.9		
III C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
II + III	10.2	22.0	37.1	33.1	73.1	10.6	15.8	19.8	23.8	20.9	177.8	31.0	
III	11.8	23.3	37.0	34.0	71.4	10.6	18.7	19.7	23.0	21.2	150.1	30.0	

(1600 - 2100 (29224 OBSERVATION HOURS))													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	43	67	23	14	15	7	8	1	1	146	10	102	
III A	20	20	11	7	6	6	8	1	3	69	10	82	
III B	8	9	2	2	2	2	2	2	2	22	2	22	
III C	1	1	1	1	1	1	1	1	1	3	1	3	
II + III	27	25	26	13	14	12	14	8	8	103	9	147	
III	20	16	11	6	9	4	9	3	1	50	21	79	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	7.0	18.0	19.0	12.9	17.4	11.6	14.5	6.7	9.8	70.6	38.1	100.9	
III A	3.6	7.7	6.8	6.3	7.6	10.5	20.9	3.7	19.4	91.0	53.9	84.0	
III B	2.0	2.3	3.0	1.7	2.7	2.0	2.0	2.0	1.7	11.4	11.4	11.4	
III C	.2	.7	.0	.0	.0	.0	.0	.0	.0	1.1	1.1	1.1	
II + III	4.7	9.3	19.3	11.3	18.7	20.7	30.4	21.0	28.8	90.0	160.0	222.9	
III	3.9	9.0	7.0	9.4	8.0	8.0	28.0	10.1	4.6	19.4	20.1	71.7	99.0

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS														
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120		
II	9.4	23.0	37.4	33.4	69.7	9.9	14.9	20.0	32.7	20.7	142.7	40.2		
III A	10.7	23.2	37.1	33.7	73.8	104.7	132.3	223.0	387.7	29.1	179.6	61.9		
III B	14.9	22.5	46.3	52.0	80.0	31.1	31.1	31.1	31.1	31.1	31.1	31.1		
III C	19.0	43.5	38.0	38.1	38.1	67.2	104.7	147.6	210.3	297.6	438.0	717.7	34.0	
II + III	10.4	22.0	38.0	38.1	38.1	67.2	104.7	147.6	210.3	297.6	438.0	717.7	91.0	
III	11.7	22.3	38.2	33.9	71.4	101.9	146.6	202.0	279.0	387.7	530.0	29.1	204.7	79.0

(2200 - 0600 (32877 OBSERVATION HOURS))													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	123	93	56	28	22	17	14	3	2	324	38	362	
III A	44	46	24	17	17	12	8	1	1	148	28	179	
III B	12	9	5	5	10	4	1	2	1	45	8	53	
III C	1	1	1	1	1	1	1	1	1	3	1	4	
II + III	33	36	40	22	35	26	38	19	13	1	186	98	284
III	33	35	28	18	21	21	10	7	4	130	44	174	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS													
CATEGORY		1-15		16-30		31-45		46-60		61-90		91-120	
II	21.0	36.0	35.7	26.9	26.5	26.7	33.3	10.5	8.9	146.0	90.9	231.7	
III A	8.3	18.2	15.2	9.3	21.5	22.9	18.2	21.3	8.2	78.3	56.0	181.7	
III B	2.0	2.6	3.0	2.6	2.6	2.6	2.8	0.8	0.7	28.0	20.2	49.9	
III C	.2	.4	.7	.0	.0	.0	.0	.0	.0	1.1	.7	.7	
II + III	6.3	20.0	29.4	19.3	42.4	41.4	56.3	26.9	24.1	126.0	202.7	417.2	
III	6.0	19.2	17.9	13.7	26.2	30.6	23.4	24.7	19.0	76.0	107.3	184.1	

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

TABLE XVII - TEMPERATURE < 29 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND < 8 KNOTS,
0700 - 1300 (28971 OBSERVATION HOURS) JANUARY 1965 - DECEMBER 1965

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	481+	481+				
II	116	64	32	10	11	2	1	1	1	1	1	232	3	238		
IIIA	43	49	17	9	7	0	4	2				119	15	134		
IIIB	8	12	7	3	2	2		1				92	3	95		
IIIC	2	1										3		3		
II + III	45	38	26	14	20	12	12	6	6	1	1	158	26	176		
III	29	34	13	9	11	14	4	4	1			98	23	121		

CATEGORY	TOTAL TIME IN EACH DURATION HOURS AND TENTHS												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	481+	481+				
II	17.8	24.2	20.1	8.8	13.4	3.7	2.3	3.9	4.6			86.3	14.3	98.8		
IIIA	7.9	17.6	10.8	4.4	8.1	10.0	9.9	6.5				47.1	32.4	78.1		
IIIB	1.3	4.9	4.1	2.7	2.4	3.3		3.0				15.5	0.4	21.9		
IIIC	.2											.8				
II + III	7.4	13.0	17.1	13.0	24.6	20.9	32.8	20.0	19.6			15.3	75.0	108.4	183.4	
III	5.2	13.1	9.1	8.0	13.3	24.2	9.9	12.6	5.6			48.7	52.3	101.0		

CATEGORY	AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS												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	481+	481+				
II	9.2	22.7	37.0	33.0	73.2	111.0	239.0	277.0				21.7	173.0	24.9		
IIIA	10.5	23.1	37.1	32.4	69.1	106.9	148.3	193.5				23.7	129.3	34.9		
IIIB	9.8	24.6	34.7	33.3	73.0	99.5		182.0				29.1	127.0	37.9		
IIIC	6.7	45.0										16.3				
II + III	9.9	23.6	39.5	35.5	73.7	104.7	151.2	200.0	200.6			92.0	32.6	180.7	63.2	
III	10.8	23.1	36.3	33.3	72.4	103.6	148.3	189.3	195.0			29.8	136.4	50.1		

CATEGORY	FREQUENCY OF OCCURRENCE												481+	1-90	91-ALL	1-ALL
	1400 - 2100	(29924 OBSERVATION HOURS)														
II	28	64	20	14	14	7	6	3	1	3		120	16	136		
IIIA	20	17	9	7	8	5	7	1				61	16	77		
IIIB	8	6	4	2	2							22				
IIIC	1		1									2				
II + III	13	24	18	13	16	13	19	7	4	3	1	56	45	129		
III	19	14	9	8	8	3	8	3	1	3	1	56	19	79		

CATEGORY	TOTAL TIME IN EACH DURATION HOURS AND TENTHS												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	481+	481+				
II	6.4	16.3	12.6	12.4	16.5	11.8	16.3	9.8				62.4	35.9	98.3		
IIIA	3.9	6.6	5.3	6.2	10.1	8.9	17.4	3.7				30.9	49.4	50.3		
IIIB	2.0	2.3	3.0	1.7	2.7							11.4				
IIIC	.3											1.1				
II + III	2.3	8.9	11.0	11.4	18.8	22.8	37.9	25.0	26.2	31.5	34.3	92.9	161.1	216.0		
III	3.6	5.1	3.6	3.4	10.0	9.1	19.1	16.1	4.6	19.4	8.8	29.6	67.1	98.7		

CATEGORY	AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS												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	481+	481+				
II	9.3	22.5	37.9	33.0	70.7	101.0	169.0	199.0				31.2	134.0	49.4		
IIIA	10.4	22.5	36.4	33.4	73.6	106.8	149.1	223.0				30.4	185.3	82.6		
IIIB	10.9	22.5	46.3	32.0	80.0							31.1				
IIIC	10.0	43.5										34.0				
II + III	10.7	22.2	38.0	32.8	70.4	103.7	149.9	214.1	202.8	279.0	307.7	98.0	31.7	811.9	77.3	
III	11.3	21.7	37.0	33.8	70.0	102.3	149.1	202.0	206.0	279.0	307.7	98.0	31.7	811.9	77.3	

CATEGORY	FREQUENCY OF OCCURRENCE												481+	1-90	91-ALL	1-ALL
	ALL	(187672 OBSERVATION HOURS)														
II	290	195	95	91	49	25	18	8	2			654	55	687		
IIIA	104	104	47	28	27	25	17	7	1	3		311	54	303		
IIIB	27	27	22	9	14	6	1	3	1			99	11	110		
IIIC	3	1	2									6	1	7		
II + III	90	109	62	48	62	49	61	32	17	6	1	292	170	362		
III	76	78	53	30	36	39	21	12	6	3	1	279	62	397		

CATEGORY	TOTAL TIME IN EACH DURATION HOURS AND TENTHS												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	481+	481+				
II	41.2</td															

TABLE XVIII - TEMPERATURE < 20 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND 9-12 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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
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	241-360	361-480	481+	1-90	91-ALL	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

FREQUENCY OF OCCURRENCE

1400 - 2100 (29224 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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
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	241-360	361-480	481+	1-90	91-ALL	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

FREQUENCY OF OCCURRENCE 2200 - 0600 (32877 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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
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	241-360	361-480	481+	1-90	91-ALL	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

FREQUENCY OF OCCURRENCE ALL (47672 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	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
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	241-360	361-480	481+	1-90	91-ALL	I-ALL
II														
IIIA														
IIIB														
IIIC														
II + III														
III														

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	361-48

TABLE XIX - TEMPERATURE > 32 DEGREES (F.), ANCHORAGE, INTERNATIONAL

0700 - 1900 (25571 OBSERVATION HOURS)

FREQUENCY OF OCCURRENCE												JANUARY 1956 - DECEMBER 1965		
CATEGORY	TIME IN MINUTES											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	481+			
II	19	17	9	2	2	1				1		91	2	93
IIIA	6	5	2	2	1							14		14
IIIB	1	3										4		4
IIIC														
III + III	12	13	9	2	8		1			1		38	2	60
III	4	3	1	1	2	1						11	1	12

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	481+				
II	3.1	7.3	5.4	1.8	2.4	1.8				6.2		20.2	0.0	20.2	
IIIA	1.0	1.8		1.9	1.6							0.1		0.1	
IIIB	1.4	1.9										2.3		2.3	
IIIC															
III + III	2.1	5.0	3.2	1.8	7.2		9.0			7.7		19.2	10.7	29.9	
III	.7	1.1	.5	1.0	2.4	1.6						9.7	1.6	7.3	

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	481+				
II	9.8	23.8	36.0	33.0	72.5	106.0				372.0		23.6	239.0	31.9	
IIIA	10.0	21.6		36.0	81.0							20.1		20.1	
IIIB	25.0	37.3										34.3		34.3	
IIIC															
III + III	10.6	23.2	38.6	48.5	72.0	97.0	179.0			462.0		30.3	320.8	44.8	
III	10.0	21.7	31.0	60.0	72.0	97.0						30.0	97.0	30.0	

1400 - 2100 (28224 OBSERVATION HOURS)

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	481+				
II	6	7	1	1	1	1	1	2	1			16		23	
IIIA	3											0	1	7	
IIIB	1	1										2		2	
IIIC	5	5			1	4	1	1	1	1		11	0	19	
III + III	2				1	1						3		3	

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	481+				
II	.9	2.6	.7	1.0	1.3	5.4	2.4	7.1	0.6			6.4	19.2	25.6	
IIIA	.9	2.6	4.0	57.0	75.0	107.0	149.0	213.5	262.0			21.2	143.0	38.7	
IIIB	8.0	19.0			75.0	149.0						13.5		13.5	
IIIC	10.0	23.0			75.0	105.3	149.0	238.0	276.0	466.0		21.8	189.8	92.3	
III + III	8.5				75.0	105.3						30.0		30.0	

2200 - 0600 (92877 OBSERVATION HOURS)

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	481+				
II	33	27	14	8	6	1	3	1	1			38	6	96	
IIIA	14	14	2	8	2	2	3	1				40	6	40	
IIIB	2	2	2	1	1	2						0	3	10	
IIIC	1											1		1	
III + III	17	17	11	8	10	3	12	6	2			63	25	60	
III	11	10	3	8	2	4	5	1				36	10	44	

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	481+				
II	11.2	24.6	37.1	93.3	69.8	105.0	137.0	189.0	266.0			27.2	195.0	37.9	
IIIA	11.4	23.4	40.0	93.5	74.0	95.5	146.3	200.0				28.3	139.7	41.3	
IIIB	15.0	16.5	33.3	48.0	89.0	111.5						33.4	111.3	49.0	
IIIC	30.0											36.0		36.0	
III + III	10.7	23.1	37.8	54.1	70.5	108.4	151.5	201.0	266.0			33.8	163.9	70.8	
III	11.3	22.7	39.3	50.9	77.5	99.8	148.0	208.0				30.3	135.1	56.1	

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	481+				
II	10.2	21.1	14.7	9.9	10.7	8.8	15.8	10.3	8.8	6.2		36.3	47.0	214.6	
IIIA	4.2	6.9	1.3	9.1	9.0	9.2	7.4	9.5				26.4	16.1	39.6	
IIIB	6.6	11.3	3.0	7.6	1.3	3.7						7.2	3.7	10.9	
IIIC	6.0	13.5	10.1	8.8	20.2	15.9	35.7	26.1	13						

ANCHORAGE, INTERNATIONAL
TABLE XX - TEMPERATURE > 32 DEGREES (F), WITH FOG, NO PRECIPITATION, AND WIND < 9 KNOTS.
0700 - 1300 (229721 OBSERVATION HOURS) JANUARY 1964 - DECEMBER 1965

FREQUENCY OF OCCURRENCE 0700 - 1900 125371 OBSERVATION HOUR(S) JANUARY 1968 - DECEMBER 1968

CATEGORY	TIME IN MINUTES												481+	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-150	151-240	241-360	361-480	481+					
I	14	18	6	1	2	1	2	1					30	3	41	
IIA	0	5			2	1							14		16	
IIIB			1	2									3		3	
IIIC																
III + III	0	11	2	2	3	1	1	1					26	3	29	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES												I-ALL	
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	I-90	%I-ALL	
I	2.2	6.2	3.6	1.0	1.0	3.5	2.9					14.2	0.0	20.2
IIA	1.0	1.4	1.2	1.9	1.4							0.1	0.1	
IIIB												1.6	1.6	
IIIC														
III + I	1.4	4.2	1.3	1.9	3.2	1.7	3.0	4.0				11.9	0.7	20.6
III	.7	1.1	5.9	1.0	1.0	1.6						4.6	1.0	0.2

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	61-70	71-120	121-180	181-240	241-360	361-480				
I	9.3	23.8	36.3	50.0	61.0	105.0	150.0				22.4	120.0	29.8	
II	10.0	21.6	35.0	51.0							26.1		26.1	
III	25.0	35.5									32.0		32.0	
IV														
V	10.3	23.1	38.0	55.3	63.3	104.0	179.0	240.0			27.5	174.3	42.7	
VI	10.0	21.7	31.0	50.0	61.0	97.0					27.7	97.0	34.0	

SEQUENCE OF OCCURRENCE 1400 - 2100 (20224 OBSERVATION HOURS)

CATEGORY	TIME IN MINUTES												1-90	91-ALL	I-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+				
I	4	6	1	1	1	3	2	1	1	1	1	13	7	20	
II	3	3	1	1	1	1	1	1	1	1	1	3	1	3	
III	1	1										2			
IV															
I + II	9	4		1	4	1	1	2				10	3	18	
III + IV	2				1							3		3	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES												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	481+				
I	.5	2.3	.7	1.0	1.3	5.4	2.4	7.0	6.4			9.7	19.1	24.8	
IIA	.6				1.2		2.4					1.8	2.4	4.2	
IIIB	.1	.3										.5		.3	
IIIC															
III	.7	1.6			1.3	6.9	2.4	3.8	9.6			9.6	22.7	26.3	
III	.9				1.2							1.9		1.9	

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	61-75	76-90	91-120	121-160	161-240	241-360				
I	9.0	23.2	40.0	57.0	73.0	107.0	149.0	209.5	282.0			24.0	163.6	70.4
IIA	11.0				73.0		109.0					26.3	143.0	50.0
IIIB	8.0	19.0										13.3		13.3
IIIC														
III + III	9.0	24.5			75.0	103.3	149.0	230.0	289.0			21.3	170.5	87.6
III	9.0				73.0							30.3		30.3

FREQUENCY OF OCCURRENCE 2200 - 0600 132017 OBSERVATION HOURS

CATEGORY	TIME IN MINUTES														
	1-15	15-30	31-45	46-60	61-90	91-120	121-180	181-240	241-360	361-480	481+	1-90	91-ALL	1-ALL	
I	36	22	12	8	6	1	3	1				82	7	39	
II	16	14	9	7	2	2	3	1				40	6	26	
IIIA	2	2	2	1	1	2						6	2	10	
IIIB												1		1	
IIIC															
III + III	18	12	9	8	12	9	12	9	2			96	26	83	
III	11	10	4	7	2	4	5	1				34	10	44	

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES														
	1-15	16-30	31-45	46-60	61-90	91-120	121-150	151-240	241-360	361-480	481+	1-90	91-180	181-All	
III	6.3	9.9	7.6	7.1	6.7	1.8	11.6	4.4				30.4	17.9	34.3	
IIIA	2.7	9.3	2.6	6.3	2.5	3.5	7.3	9.9				16.6	19.0	31.6	
IIDB	0.9	0.6	1.1	0.8	1.3	3.7						4.3	3.7	8.2	
IIC															0.3
II + III	3.2	7.3	3.6	7.2	14.3	9.1	29.9	17.0	8.9			26.0	60.9	99.0	
III	2.1	3.8	2.6	6.0	2.6	6.7	12.4	9.5				17.0	22.3	39.3	

AVERAGE TIME IN EACH DURATION MINUTES AND TENTHS

CATEGORY	TIME IN MINUTES												4814	1-90	91-ALL	1-ALL
	1-12	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480	481+					
I	11.4	24.4	36.0	53.5	67.3	110.5	139.2	266.0				11.4	122.0	122.0	11.4	
IIIA	11.4	23.4	37.7	54.0	74.0	93.5	146.5	206.0				11.4	120.7	120.7	11.4	
IIIB	15.0	16.3	33.5	48.0	87.0	111.5	146.5	206.0				15.0	111.3	111.3	15.0	
IIIC	30.0	30.0	37.0	48.0	87.0	111.5	146.5	206.0				30.0	80.0	80.0	30.0	
III + III	10.4	22.0	37.0	54.1	71.4	109.4	149.7	209.4	266.0			10.4	102.2	102.2	10.4	
III	11.3	22.7	39.0	51.0	77.5	99.8	148.6	208.0				11.3	139.1	139.1	11.3	

FREQUENCY OF OCCURRENCE

CATEGORY	TIME IN MINUTES												401+	1-49	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-180	181-240	241-300	361-480	481+					
I	52	44	19	10	8	6	7	2	2	133	17	130				
II	21	18	3	9	4	2	3	1	1	95	6	61				
III	3	6	4	1	1	2				19	3	19				
IV	1									1		1				
V + VI	31	27	11	10	16	10	14	7	6	95	35	130				
VII	17	19	5	8	4	9	2			67	11	58				

TOTAL TIME IN EACH DURATION HOURS AND TENTHS

CATEGORY	TIME IN MINUTES												4010	1-90	91-ALL	1-ALL
	1-15	16-30	31-45	46-60	61-90	91-120	121-150	151-240	241-360	361-480	481+					
I	9.0	17.6	11.7	9.1	9.0	10.7	16.3	7.0	0.0			90.0	43.0	90.0		
II	3.9	6.9	2.0	0.2	3.0	3.2	7.4	3.9				23.7	14.1	38.0		
III	0.6	1.3	2.3	0.8	1.5	3.7						6.3	3.7	10.2		
IV	10.3														10.3	
V + VI	9.2	10.4	6.9	9.1	16.7	17.7	35.3	14.8	18.9			20.2	90.0	140.0		
VII	3.0	4.9	3.1	7.0	3.2	8.9	12.4	3.9				23.1	16.1	47.3		

AVERAGE TIME IN EACH BURAYON MINUTES AND SECONDS

CATEGORY	THE INDIVIDUALS												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	481+					
I	10.4	24.0	38.6	54.3	67.5	106.0	161.3	209.3	264.0	295.0	391.0	39.7	23.0	191.0	38.2	
II	11.0	22.9	39.7	54.9	73.3	99.3	146.7	208.0	260.0	280.0	380.0	40.0	20.0	198.0	38.2	
III	12.7	19.3	34.5	48.0	69.0	111.3	151.3	201.3	251.3	281.3	381.3	40.0	20.0	111.3	40.0	
IV	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
V + VI	10.1	23.0	37.6	54.6	70.1	106.4	151.3	212.6	277.9	317.1	409.1	47.6	21.7	169.1	47.6	
VII	10.7	22.5	37.4	52.1	77.3	99.2	146.0	208.0	260.0	280.0	380.0	40.0	20.0	191.0	38.2	

