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ATMOSPHERIC STRUCTURE. PART 3. UPPER
AIR AND SURFACE DATA: STALLION SITE

Marjorie M. Hoidale, et al

Army Electronics Command
White Sands Missile Range, New Mexico

January 1975

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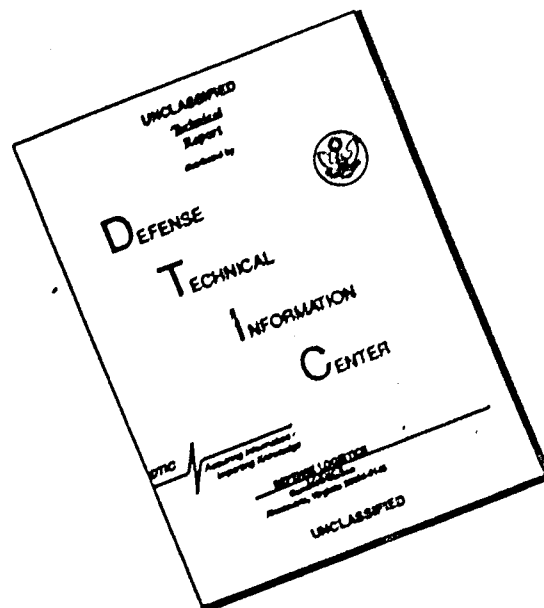
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A statistical analysis of surface and upper air rawinsonde data is presented for Stallion Site, White Sands Missile Range, New Mexico. Atmospheric parameters covered for the layer from the surface to 100,000 feet above mean sea level are: wind, temperature, pressure, density, moisture, index of refraction and freezing level. Upper air climatological information is based on the period of observation from 1961-1973; while the surface temperature data spans 1962-1973, precipitation records 1963-1973, and wind data 1965-1973.		

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FOREWORD

This report is a revision of Data Report 323-*AD 844675* titled "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air Data: Stallion Site" published in 1968 and Data Report 399, "White *AD 856240* Sands Missile Range Climatology No. 5, Stallion Site" published in 1969.

The revision updates the original records to cover the period through 1973 and combines material previously offered so that surface data and rawinsonde data for each 1,000 feet up to 16,000 feet above mean sea level, as well as rawinsonde data for additional levels up to 100,000 feet, are available in a single report.

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INTRODUCTION

Activities of various projects on Range often necessitate a knowledge of upper air atmospheric conditions or surface data weeks or months in advance of the scheduled mission. As this exceeds the capability of the usual 24-56 hour forecast and the longer five-day outlook, a statistical analysis of exoteric meteorological data is desirable. Missions at specific launch complexes frequently demand a detailed knowledge of conditions for that particular area as opposed to data for the entire Range. For this reason, an analysis has been presented for individual rawinsonde stations proximate to Range test sites and launch complexes (1-6).*

Section 1 of this report, based on rawinsonde data collected during the observational period 1961-1973, presents the frequency of occurrence of the upper air meteorological conditions, and the mean and extreme values classified by months and seasons that can be expected from the surface to 100,000 feet above mean sea level (MSL) at Stallion Site [Figure 1], latitude 33° 48' north, longitude 106° 40' west, elevation 4,940 feet MSL. Seven parameters are analyzed: wind, temperature, pressure, density, moisture, index of refraction and freezing level. Note should be made at this point that White Sands Missile Range (WSMR) rawinsonde releases do not follow a routine schedule, but are taken depending upon the mission requirements [Table I].

Surface measurements of meteorological conditions at Stallion Site consist of wind, temperature, and precipitation data. These are presented in tabular form in Section II.

*Upper air and surface data have been published in earlier reports for White Sands Desert, Holloman, Small Missile Range, Jallen, and Apache Sites. Reports 1 and 2 in the Atmospheric Structure series presented analyses of surface data for "A" Station [7, 8].

EXPLANATION OF TERMS

1. Winds Aloft or Surface Wind

- A. Wind directions are given as the true direction from which the wind is blowing.
- B. Wind speeds are measured in knots (nautical miles per hour).

2. Resultant Wind [9, p.480]

In climatology, the resultant wind is the vectorial average of all wind directions and speeds for a given level at a given place for a certain period, as a month.

It is obtained by resolving each wind observation into components from north and east, summing over the given period, obtaining the averages, and reconvertng the average components into a single vector.

3. Surface Wind Gusts

Wind gusts are characterized by sudden, intermittent increases in speed, with at least nine knots variation between peaks and lulls. The average time interval between peaks and lulls usually should not exceed 20 seconds.

4. Standard Vector Deviation of the Wind [10, p.173, 179, 195-198]

The standard vector deviation of the wind is a measure of dispersion about the end of the mean resultant wind vector. A circle drawn with the center at the end of the mean resultant wind vector and a radius of the standard vector deviation includes 63 per cent of the vector winds.

$$\sigma^2 = \sum \frac{V^2}{N} - V_R^2$$

where,

σ = Standard vector deviation, knots

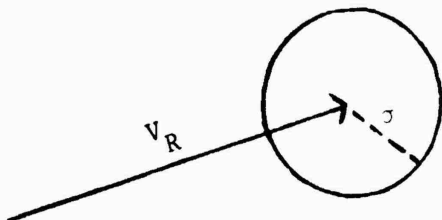
N = Number of cases

V_R = Speed of vector mean wind

V = Module of the vector wind

EXPLANATION OF TERMS

4. Standard Vector Deviation of the Wind [10] (Cont)



5. Constancy [10, pp. 198-199]

Constancy is a term used to show how constant the direction of the wind is. It is determined by dividing the mean scalar wind into the magnitude of the mean resultant wind.

$$Q = \frac{100 V_R}{V_S} \quad (\text{per cent})$$

where,

Q = Constancy of wind direction (per cent)

V_R = Module or speed of vector mean wind

V_S = Speed of scalar mean wind

The constancy of a set of winds is zero when they blow equally frequently from all directions, with the same average speed; the constancy is 100 when they blow from exactly the same direction, but not necessarily all with the same speed.

6. Temperature

- A. Temperatures are reported in degrees Fahrenheit for surface observations and in degrees Celsius for upper air (rawinsonde) observations.
- B. Surface maximum and minimum temperatures are measured by standard liquid-in-glass thermometers which are read and reset each working day. When stations are not manned on weekends and holidays, the extreme temperatures are obtained from calibrated thermographs adjusted to maximum and minimum thermometers.

EXPLANATION OF TERMS

6. Temperature (Cont)

- C. Temperature Extreme. In climatology, the highest and, in some cases, the lowest temperature observed during a given period or during a given month or season of that period. If this is the whole period for which observations are available, it is the absolute extreme [9, p.216].

7. Density [11]

$$\rho_X = 348.38 \left[\frac{p}{K_{VX}} \right] \quad \text{grams/cubic meter}$$

$$K_{VX} = K \left[\frac{p}{p - 0.379e} \right]$$

$$e = 0.0611 f 10^{\left(\frac{7.5C}{C + 237.3} \right)}$$

where,

ρ_X = Density, in grams/cubic meter

p = Pressure, in millibars

K_{VX} = Virtual temperature, in degrees Kelvin

e = Partial pressure of aqueous vapor, in millibars

C = Temperature, in degrees Celsius

$K = C + 273.16$, Temperature, Absolute, in degrees Kelvin

f = Relative humidity, in per cent

8. Index of Refraction [11]

$$n_X = 1 + \frac{77.6}{K} \left[p + e \left(\frac{4830}{K} - \frac{11}{77.6} \right) \right] 10^{-6}$$

EXPLANATION OF TERMS

8. Index of Refraction [11, (Cont)]

$$e = 0.0611 f 10^{\left[\frac{7.5C}{C + 237.3} \right]}$$

where,

n_X = Index of refraction, dimensionless

$K = C + 273.16$, Temperature, Absolute, in degrees Kelvin

C = Temperature, in degrees Celsius

p = Pressure, in millibars

f = Relative humidity, in per cent

e = Partial pressure of aqueous vapor, in millibars

9. Mixing Ratio [9, p.374; 12]

In a system of moist air, the dimensionless ratio of the mass of water vapor to the mass of dry air.

$$\omega = \frac{0.622e}{p - e} \times 10^3$$

where,

ω = Mixing ratio, grams/kilogram

p = Pressure, in millibars

e = Partial pressure of aqueous vapor, in millibars

$$e = r e_s$$

where,

r = Relative humidity, in per cent

e_s = Saturation vapor pressure, in millibars

EXPLANATION OF TERMS

9. Mixing Ratio [9, p.374; 12] (Cont)

$$\log_{10} e_s = -7.90298 \left(\frac{T_s}{T} - 1 \right) + 5.02808 \log_{10} \left(\frac{T_s}{T} \right) - 1.3816 \times 10^{-7}$$

$$\left[10^{11.344 \left(1 - \frac{T}{T_s} \right)} - 1 \right] + 8.1328 \times 10^{-3} \left[10^{-3.49149 \left(\frac{T_s}{T} - 1 \right)} - 1 \right] + \log_{10} e_{ws}$$

where,

T = Dry bulb temperature, in degrees Kelvin

T_s = Steam point temperature, 373.16 degrees Kelvin

e_{ws} = Saturation pressure of pure ordinary liquid water
at steam point temperature (T_s), 1013.246 millibars

10. Precipitable Water [9, p.437; 12]

Precipitable water is defined as the total atmospheric water vapor contained in a vertical column of unit cross-sectional area extending between any two specified levels. It may be expressed as the height to which that water substance would stand if completely condensed and collected in a vessel of the same unit cross section.

Mathematically,

$$W = -\frac{1}{g} \int_{p_1}^{p_2} \omega dp$$

where,

W = Precipitable water vapor, centimeters

ω = Mixing ratio, grams/kilogram

p = Pressure, bounded by p_1 and p_2 , millibars

g = Acceleration of gravity, centimeters per sec²

If g is expressed in cm sec⁻², p in millibars, and ω in g kg⁻¹, then W is in centimeters. With these units, the above equation may be written as:

$$W_{(cm)} = 0.001 \int_{p_1}^{p_2} \omega dp$$

EXPLANATION OF TERMS

10. Precipitable Water [9, p.437; 12] (Cont)

To determine the precipitable water within the various layers, the preceding equation will be numerically integrated. Since the mixing ratio, ω , may be expressed as

$$\omega = \frac{0.622e}{p - e}$$

it is seen that

$$W_{(cm)} = 0.622 \int_{p_1}^{p_2} \frac{e}{p - e} dp$$

where e and p are expressed in millibars. Note that a factor of 10^3 has been introduced to compensate for units.

11. Relative Humidity [9, p.477]

Popularly called humidity. The (dimensionless) ratio of the actual vapor pressure of the air to the saturation vapor pressure. The relative humidity is usually expressed in per cent.

12. Precipitation

Precipitation is measured in a standard eight-inch rain gage, and is recorded in hundredths of an inch. Less than .01 inch is reported as a trace (an amount too small to measure).

13. Season [9, p.499]

A division of the year according to some regularly recurrent phenomena, usually astronomical or climatic.

In middle latitudes four seasons are recognized, which for climatological purposes are (Northern Hemisphere): winter - December, January and February; spring - March, April and May; summer - June, July and August; autumn or fall - September, October and November. The annual course of weather does not always follow these divisions closely, but the use of four periods of three calendar months each is so convenient for statistical purposes that no other division has been seriously considered.

RELIABILITY OF DATA [13]

The standard reliabilities of the instrumentation and the derived data are as follows:

UPPER AIR METEOROLOGICAL PARAMETERS

<u>Parameter and Instrument Types</u>	<u>Range of Values or Environment</u>	<u>Data Reliability</u>
WIND VELOCITY		
Rawin Sets, AN/GMD-1A, WBRT-47 (with- out slant range)	Surface to 30 km alt. (98,425 Ft) [2 minutes or 0.6 km (1,969 Ft) mean layer winds]	6 knots or 12% of vector wind, whichever is greater
Rawin Sets, AN/GMD-2, 2A, 4 (with slant range)	Surface to 30 km alt. (98,425 Ft) [2 minutes or 0.6 km (1,969 Ft) mean layer winds]	4 knots or 10% of vector wind, whichever is greater
Rawin using FPS-16 or similar radar	Surface to 30 km alt. (98,425 Ft) [20 seconds or 100 m. (328 Ft) mean layer winds]	3 knots or 6% of vector wind, whichever is greater

Note: All rawinsonde mean layer winds are unreliable when tracking angles are within 6 degrees of the horizon or surface obstructions which often occurs under strong jet stream conditions.

DENSITY

Rawin Sets AN/GMD-1A*, 2A*, 4*, WTRT-57*, etc.	(15 to 1200 gm/m ³) Surface to 10 km alt. (32,808 Ft) 10 to 30 km alt. (32,808 to 98,425 Ft)	0.4% 1%
--	--	----------------

*Density Computed

RELIABILITY OF DATA [13]

UPPER AIR METEOROLOGICAL PARAMETERS

<u>Parameter and Instrument Types</u>	<u>Range of Values or Environment</u>	<u>Data Reliability</u>
RELATIVE HUMIDITY		
Rawin Sets, AN/GMD-1A, 2A 4, WBRT-57, etc. using ML-476 Hy- gristor or equiv.	(5 to 99%)	
	Temperature greater than 0°C	5%
	Temperature 0° to -20°C	10%
	-21°C to -40°C	20%
	Below -40°C	unreliable
PRESSURE		
Rawin Sets, AN/GMD-1A, 2A*, 4*, WBRT-57, etc.	10 to 50 mb	1.0%
	50 to 200 mb	0.6%
	200 to 500 mb	0.3%
	greater than 500 mb	0.2%
*Pressure Computed		
INDEX OF REFRACTION		
Rawin Sets*, AN/GMD-1A, 2A, 4, WBRT-57, SMQ-1, 3	5 to 200 N-units	1%
	200 to 400 N-units	2.5%
*Refractive Index Computed		
TEMPERATURE		
Rawin Sets, AN/GMD-1A, 2A, 4, WBRT-57, SMQ 1, etc. using ML- 419 element or equiv.	(-90°C to 60°C)	
	Surface to 20 km alt. (65,617 Ft)	1°C*
	20 km to 30 km alt. (65,617 to 98,425 Ft)	2.5°C*

*Root Mean Square (RMS) deviations about a mean value which can be considered the best estimate of the measure of the quantity.

RELIABILITY OF DATA [13]

SURFACE METEOROLOGICAL PARAMETERS

<u>Parameter and Instrument Types</u>	<u>Range of Values or Environment</u>	<u>Data Reliability</u>
WIND		
Wind Measuring Set AN/GMQ-11	Direction 0-360 degrees Speed 1-160 knots	3 deg. 2.0 knots or 3%
RAINFALL		
Precipitation Gauges ML-17, ML-217, etc.	0.01 to 20 inches	0.01 inches
TEMPERATURE		
Liquid in Glass ML-24, M1-7, etc.	-90°F to + 145°F	0.5°F*
Thermographs, Bimetal & Bourdon tube	-20°F to + 110°F	2.0°F*

*Root Mean Square (RMS) deviations about a mean value which can be considered the best estimate of the measure of the quantity.

Manual and computer verification techniques were employed to insure a high degree of accuracy.



FIGURE 1. MAP OF WHITE SANDS MISSILE RANGE

TABLE I
FREQUENCY DISTRIBUTION OF UPPER AIR SOUNDINGS BY HOURS AND MONTHS
PERIOD OF RECORD 1961-1973
STATION SITE

hour (MST)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL BY HOURS
1	0	1	0	0	1	1	0	0	0	0	1	0	4
2	2	0	0	0	0	2	1	2	2	0	0	1	10
3	1	1	0	3	5	2	3	4	4	3	0	0	26
4	3	4	5	5	8	4	0	3	12	5	5	0	54
5	1	6	5	4	8	1	7	10	2	5	3	1	53
6	2	4	6	8	15	12	14	16	4	1	6	2	90
7	13	13	17	39	33	34	48	39	32	29	12	15	329
8	40	38	38	61	60	48	57	66	54	73	40	35	619
9	49	84	79	84	50	40	51	53	47	62	64	58	721
10	35	44	48	60	44	46	23	32	29	38	42	24	465
11	38	40	45	64	49	31	30	30	40	31	32	33	463
12	43	59	42	43	28	27	33	30	31	30	39	26	431
13	35	33	36	34	45	22	23	26	26	32	27	27	367
14	37	44	43	43	30	17	14	21	27	30	55	33	393
15	39	41	32	33	16	14	14	16	13	29	29	27	303
16	24	17	14	12	11	11	2	7	10	17	14	11	154
17	12	5	8	4	9	4	3	5	7	9	6	10	82
18	3	2	2	0	2	3	0	2	1	3	3	3	24
19	1	2	2	1	0	1	2	0	1	1	1	0	12
20	1	0	0	0	5	2	0	1	0	0	1	0	10
21	1	1	0	0	0	2	1	1	1	0	0	0	7
22	0	1	0	0	0	2	0	0	0	1	1	0	5
23	0	0	0	0	0	0	1	0	0	0	0	1	2
24	4	0	0	0	1	0	0	1	1	1	1	0	9
TOTAL BY MONTHS	389	439	426	498	430	326	327	365	344	400	382	307	

4633 UPPER AIR SOUNDINGS WERE TAKEN DURING THIS PERIOD

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR WIND DATA

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TABLE II
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)	RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N -S +E -W					
4940.	385.	24.	0.	1.4 -1.0	326.	2.	4.	42.	6.
5000.	448.	24.	0.	1.1 -.9	320.	1.	4.	33.	7.
6000.	449.	27.	0.	2.5 -2.2	319.	3.	8.	39.	9.
7000.	449.	38.	1.	2.5 -5.3	295.	6.	12.	48.	13.
8000.	447.	44.	1.	3.0 -8.2	290.	9.	15.	57.	15.
9000.	451.	51.	0.	3.7 -10.3	290.	11.	17.	62.	16.
10000.	452.	60.	1.	4.7 -12.3	291.	13.	20.	67.	17.
11000.	455.	62.	1.	5.6 -14.7	291.	16.	22.	70.	19.
12000.	456.	63.	2.	6.4 -16.8	291.	18.	25.	73.	20.
13000.	456.	67.	1.	6.7 -19.7	290.	20.	27.	74.	22.
14000.	455.	77.	2.	6.9 -20.4	289.	22.	29.	74.	24.
15000.	453.	80.	3.	7.0 -22.0	288.	23.	31.	74.	26.
16000.	451.	100.	3.	6.9 -23.2	287.	24.	33.	74.	27.
18000.	446.	107.	4.	6.9 -25.3	285.	26.	35.	74.	30.
20000.	429.	119.	3.	6.9 -27.3	284.	28.	38.	74.	32.
25000.	393.	130.	6.	7.8 -31.5	284.	32.	46.	71.	40.
30000.	363.	135.	3.	8.3 -37.8	282.	39.	54.	72.	46.
35000.	321.	143.	0.	8.1 -43.8	281.	45.	60.	74.	49.
40000.	289.	186.	10.	3.2 -52.2	273.	52.	63.	83.	46.
45000.	260.	142.	6.	3.1 -49.3	274.	49.	57.	87.	36.
50000.	219.	111.	0.	2.1 -43.9	273.	44.	49.	89.	29.
55000.	179.	107.	5.	2.4 -37.6	274.	38.	42.	91.	25.
60000.	164.	88.	5.	1.8 -23.6	274.	24.	28.	84.	21.
65000.	154.	112.	2.	2.6 -14.8	280.	15.	19.	78.	19.
70000.	146.	74.	1.	2.0 -7.3	285.	8.	15.	50.	17.
75000.	139.	53.	0.	2.3 -3.9	300.	5.	15.	30.	18.
80000.	122.	63.	1.	2.7 -2.5	316.	4.	17.	22.	20.
85000.	115.	62.	2.	3.1 -.6	350.	3.	19.	17.	22.
90000.	102.	74.	3.	1.8 -2.0	312.	3.	21.	13.	26.
95000.	96.	95.	2.	1.1 -4.9	282.	5.	25.	20.	30.
100000.	74.	93.	5.	2.6 -5.5	296.	6.	29.	21.	34.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
4940.	394.	24.	0.	2.0		-0.7	340.	2.	6.	36.	7.
5000.	501.	24.	0.	1.7		-0.7	338.	2.	6.	31.	7.
6000.	499.	37.	0.	2.1		-2.3	312.	3.	9.	33.	10.
7000.	499.	63.	1.	1.5		-5.0	287.	5.	13.	41.	14.
8000.	497.	44.	1.	2.0		-7.2	286.	7.	15.	50.	15.
9000.	497.	46.	2.	2.7		-9.3	286.	10.	17.	57.	16.
10000.	498.	56.	1.	3.6		-11.7	287.	12.	19.	60.	18.
11000.	496.	66.	1.	4.4		-14.1	287.	15.	22.	68.	19.
12000.	496.	65.	3.	5.2		-16.6	287.	17.	24.	72.	20.
13000.	496.	73.	2.	5.5		-18.7	286.	20.	26.	74.	22.
14000.	495.	78.	2.	5.5		-20.6	285.	21.	29.	75.	24.
15000.	493.	84.	2.	5.5		-22.3	284.	23.	31.	75.	25.
16000.	494.	86.	1.	5.6		-23.7	283.	24.	32.	75.	27.
18000.	491.	88.	4.	5.4		-26.1	282.	27.	36.	74.	30.
20000.	478.	103.	5.	5.9		-29.1	282.	30.	40.	74.	34.
25000.	436.	156.	5.	5.3		-37.7	278.	38.	50.	76.	41.
30000.	396.	202.	4.	3.5		-46.4	274.	47.	59.	78.	46.
35000.	341.	179.	0.	1.5		-57.5	272.	58.	69.	83.	50.
40000.	309.	166.	8.	.8		-63.6	271.	64.	71.	89.	43.
45000.	274.	118.	4.	1.3		-59.4	271.	59.	66.	91.	35.
50000.	233.	124.	13.	-0.1		-52.1	270.	52.	57.	92.	29.
55000.	191.	79.	9.	1.9		-41.7	273.	42.	46.	91.	25.
60000.	175.	75.	4.	3.1		-25.1	277.	25.	29.	88.	20.
65000.	157.	65.	0.	4.0		-14.3	286.	15.	19.	77.	17.
70000.	131.	44.	2.	3.0		-6.9	294.	8.	16.	48.	16.
75000.	122.	47.	1.	3.0		-5.4	299.	6.	16.	38.	18.
80000.	111.	50.	2.	2.6		-2.8	313.	4.	18.	21.	21.
85000.	107.	61.	1.	1.2		-5.2	283.	5.	23.	23.	27.
90000.	100.	88.	2.	1.2		-9.7	277.	10.	27.	37.	31.
95000.	95.	88.	4.	.9		-10.5	275.	11.	32.	33.	36.
100000.	73.	139.	3.	-0.3		-13.1	269.	13.	37.	36.	42.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

MARCH

GEO-METRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
4940.	415.	30.	0.	-1.0		-1.4		234.	2.	25.	9.
5000.	505.	30.	0.	-.8		-1.1		236.	1.	19.	9.
6000.	506.	32.	1.	-1.1		-3.0		249.	3.	31.	12.
7000.	506.	39.	1.	-2.1		-5.5		249.	6.	45.	14.
8000.	506.	46.	1.	-2.1		-7.7		255.	8.	52.	15.
9000.	506.	54.	0.	-1.9		-10.0		259.	10.	59.	16.
10000.	505.	58.	0.	-1.5		-12.8		263.	13.	67.	17.
11000.	502.	61.	2.	-1.0		-15.8		266.	16.	73.	18.
12000.	502.	63.	2.	-.5		-18.7		268.	19.	76.	19.
13000.	502.	65.	0.	-.1		-21.4		270.	21.	79.	20.
14000.	500.	71.	0.	-.1		-24.1		270.	24.	81.	22.
15000.	500.	78.	3.	-.0		-26.8		270.	27.	82.	24.
16000.	500.	82.	1.	.0		-29.3		270.	29.	83.	25.
18000.	499.	90.	1.	-.3		-33.9		270.	34.	84.	28.
20000.	490.	100.	0.	-1.7		-38.7		267.	39.	86.	31.
25000.	441.	139.	1.	-6.2		-50.4		263.	51.	87.	39.
30000.	397.	156.	0.	-7.6		-59.8		263.	60.	88.	45.
35000.	329.	175.	0.	-6.0		-63.1		265.	63.	90.	44.
40000.	269.	155.	0.	-4.7		-61.4		266.	62.	92.	39.
45000.	242.	146.	0.	-6.0		-56.7		264.	57.	95.	31.
50000.	208.	103.	0.	-5.2		-48.2		264.	49.	95.	25.
55000.	173.	93.	0.	-3.5		-40.1		265.	40.	96.	22.
60000.	152.	79.	3.	-3.6		-22.4		261.	23.	88.	19.
65000.	136.	57.	2.	-1.7		-13.2		263.	13.	78.	15.
70000.	129.	58.	0.	-.8		-7.2		264.	7.	55.	15.
75000.	117.	54.	2.	-.6		-4.6		263.	5.	36.	15.
80000.	107.	57.	2.	-1.1		-4.9		257.	5.	31.	19.
85000.	102.	61.	0.	-1.2		-4.1		254.	4.	26.	20.
90000.	91.	75.	1.	-2.5		-9.1		255.	9.	44.	23.
95000.	83.	86.	4.	-2.3		-14.7		261.	15.	56.	26.
100000.	62.	88.	0.	-2.2		-18.5		263.	19.	60.	30.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STATION SITE
PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W			
4940.	444.	26.	0.	-0.6		-1.1	240.	1.	17.	9.
5000.	559.	26.	0.	-0.9		-1.3	235.	2.	22.	9.
6000.	559.	31.	0.	-1.7		-2.7	237.	3.	32.	11.
7000.	559.	40.	1.	-2.9		-4.7	238.	6.	44.	14.
8000.	558.	44.	1.	-3.6		-6.6	241.	7.	54.	15.
9000.	559.	44.	0.	-3.9		-8.3	245.	9.	61.	15.
10000.	559.	47.	1.	-3.9		-10.4	249.	11.	66.	15.
11000.	559.	52.	1.	-4.1		-12.7	252.	13.	71.	17.
12000.	559.	59.	1.	-4.5		-15.4	254.	16.	75.	18.
13000.	559.	66.	1.	-5.0		-18.1	255.	19.	77.	20.
14000.	560.	70.	2.	-5.4		-20.5	255.	21.	80.	22.
15000.	560.	81.	0.	-5.7		-22.5	256.	23.	81.	23.
16000.	559.	92.	0.	-5.9		-24.4	256.	25.	82.	24.
18000.	552.	91.	0.	-6.9		-27.8	256.	29.	83.	27.
20000.	526.	100.	0.	-7.5		-31.0	256.	32.	83.	30.
25000.	482.	123.	2.	-10.7		-40.1	255.	41.	84.	37.
30000.	453.	148.	0.	-13.0		-47.4	255.	49.	86.	42.
35000.	353.	137.	0.	-12.1		-52.3	257.	54.	86.	43.
40000.	290.	138.	0.	-14.8		-53.8	255.	56.	89.	39.
45000.	255.	124.	0.	-13.3		-51.4	256.	53.	93.	29.
50000.	230.	106.	3.	-10.7		-44.4	256.	46.	93.	25.
55000.	192.	82.	9.	-8.9		-32.9	255.	34.	92.	21.
60000.	173.	82.	0.	-5.3		-17.6	253.	18.	86.	17.
65000.	162.	55.	0.	-2.9		-7.5	249.	13.	63.	14.
70000.	147.	60.	1.	-1.2		-4	201.	9.	13.	12.
75000.	140.	55.	1.	-1.7		-1.0	212.	11.	18.	14.
80000.	125.	34.	1.	-1.5		-1	186.	10.	14.	12.
85000.	116.	38.	0.	-1.4		-3.2	246.	11.	31.	13.
90000.	110.	51.	0.	-2.0		-8.5	257.	14.	64.	13.
95000.	98.	40.	0.	-2.4		-13.1	260.	17.	80.	14.
100000.	73.	67.	0.	-1.8		-19.9	265.	22.	92.	16.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E					
4940.	443.	33.	0.	-1.6		-0.8	205.	2.	7.	27.	9.
5000.	488.	32.	0.	-1.5		-0.8	208.	2.	7.	24.	9.
6000.	488.	30.	0.	-2.4		-2.0	221.	3.	9.	34.	10.
7000.	488.	41.	1.	-4.2		-3.8	222.	6.	11.	50.	12.
8000.	488.	43.	1.	-5.0		-5.0	225.	7.	12.	57.	13.
9000.	490.	46.	0.	-5.3		-6.3	230.	8.	13.	63.	13.
10000.	491.	53.	0.	-5.5		-7.7	234.	9.	14.	68.	13.
11000.	488.	6.	0.	-5.7		-9.2	238.	11.	15.	71.	14.
12000.	487.	68.	0.	-6.2		-11.0	241.	13.	17.	75.	16.
13000.	485.	69.	1.	-6.8		-12.7	242.	14.	19.	77.	17.
14000.	483.	70.	1.	-7.2		-14.2	243.	16.	20.	78.	18.
15000.	479.	74.	3.	-7.5		-15.8	245.	18.	22.	79.	19.
16000.	478.	80.	0.	-7.4		-17.2	247.	19.	24.	79.	20.
18000.	474.	88.	0.	-7.6		-20.3	250.	22.	27.	81.	22.
20000.	464.	104.	3.	-7.5		-23.2	252.	24.	29.	83.	24.
25000.	449.	122.	0.	-8.1		-29.3	255.	30.	36.	85.	29.
30000.	416.	125.	0.	-8.1		-34.7	257.	36.	41.	87.	32.
35000.	333.	152.	0.	-10.2		-41.0	256.	42.	48.	89.	35.
40000.	285.	126.	0.	-8.9		-46.2	259.	47.	52.	91.	35.
45000.	269.	129.	0.	-9.1		-42.4	258.	43.	46.	94.	27.
50000.	232.	96.	9.	-6.9		-35.5	259.	36.	39.	94.	20.
55000.	188.	74.	3.	-4.7		-22.9	258.	23.	26.	89.	18.
60000.	174.	45.	0.	-2.5		-7.9	252.	8.	12.	68.	12.
65000.	154.	30.	1.	.0		-2.2	273.	0.	8.	2.	9.
70000.	142.	26.	0.	-0.0		3.8	91.	4.	8.	46.	9.
75000.	133.	21.	1.	.1		6.1	89.	6.	9.	66.	8.
80000.	127.	29.	2.	-0.3		6.9	93.	7.	11.	60.	11.
85000.	121.	33.	0.	-0.5		6.2	95.	6.	11.	54.	12.
90000.	115.	33.	1.	-1.1		3.4	108.	4.	12.	30.	13.
95000.	99.	36.	0.	-1.7		2.5	124.	3.	13.	23.	15.
100000.	76.	41.	0.	-1.6		-0.0	182.	2.	13.	12.	16.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STATION SITE
PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S					
4940.	343.	67.	0.	-1.6	-0.8	205.	2.	6.	28.	9.
5000.	369.	66.	0.	-1.6	-0.8	207.	2.	6.	28.	8.
6000.	370.	47.	0.	-2.4	-2.0	220.	3.	8.	38.	10.
7000.	369.	36.	0.	-3.9	-3.3	220.	5.	10.	50.	11.
8000.	370.	34.	0.	-4.6	-4.3	223.	6.	11.	55.	11.
9000.	370.	36.	1.	-4.6	-5.0	227.	7.	12.	56.	12.
10000.	373.	40.	1.	-4.6	-5.6	231.	7.	13.	58.	12.
11000.	373.	44.	1.	-4.6	-6.4	234.	8.	13.	60.	13.
12000.	375.	50.	2.	-4.9	-7.5	237.	9.	15.	61.	14.
13000.	373.	51.	1.	-5.4	-8.6	238.	10.	16.	62.	16.
14000.	373.	48.	2.	-5.8	-9.5	239.	11.	18.	63.	17.
15000.	371.	50.	0.	-6.5	-10.5	238.	12.	19.	65.	18.
16000.	370.	50.	0.	-7.0	-11.5	239.	13.	20.	66.	19.
18000.	367.	61.	1.	-7.1	-13.1	242.	15.	22.	66.	21.
20000.	360.	67.	2.	-7.1	-14.6	244.	16.	24.	68.	22.
25000.	333.	64.	1.	-6.7	-18.9	250.	20.	27.	74.	23.
30000.	309.	79.	0.	-6.7	-23.6	254.	25.	33.	75.	27.
35000.	257.	96.	0.	-6.2	-29.6	258.	30.	39.	77.	32.
40000.	220.	102.	0.	-5.5	-34.0	261.	34.	44.	79.	34.
45000.	203.	85.	0.	-5.6	-34.1	261.	35.	41.	83.	29.
50000.	191.	79.	0.	-5.6	-24.1	257.	25.	30.	82.	22.
55000.	171.	46.	1.	-3.7	-9.8	249.	11.	17.	63.	15.
60000.	158.	45.	0.	-3.6	3.3	137.	5.	11.	45.	11.
65000.	139.	47.	1.	-1.6	10.5	99.	11.	12.	85.	9.
70000.	133.	30.	1.	-1.3	13.7	96.	14.	15.	94.	8.
75000.	128.	34.	0.	-0.6	17.4	92.	17.	18.	97.	7.
80000.	124.	39.	6.	-1.1	19.5	93.	20.	20.	96.	9.
85000.	118.	41.	4.	-0.2	20.5	91.	20.	21.	98.	9.
90000.	112.	43.	4.	-1.8	20.7	95.	21.	22.	96.	10.
95000.	100.	46.	0.	-0.9	22.9	92.	23.	24.	97.	11.
100000.	85.	43.	0.	-2.1	23.9	95.	24.	25.	97.	11.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W			
4940.	363.	22.	0.	-0.1		.9	95.	1.	22.	6.
5000.	386.	22.	0.	-0.2		.9	99.	1.	21.	6.
6000.	386.	23.	0.	-0.8		.6	140.	1.	17.	7.
7000.	386.	27.	0.	-2.4		.8	198.	2.	34.	8.
8000.	386.	31.	1.	-2.3		-1.9	218.	3.	38.	9.
9000.	388.	23.	1.	-1.5		-1.8	231.	2.	29.	9.
10000.	389.	25.	0.	-0.7		-1.5	247.	2.	20.	9.
11000.	391.	27.	1.	.0		-0.9	271.	1.	11.	10.
12000.	392.	27.	0.	.3		-0.2	329.	0.	4.	10.
13000.	392.	26.	0.	.6		.7	50.	1.	9.	11.
14000.	392.	31.	1.	.5		1.4	69.	1.	14.	12.
15000.	391.	36.	1.	.5		1.8	76.	2.	17.	12.
16000.	390.	37.	1.	.5		2.1	77.	2.	19.	13.
18000.	388.	39.	0.	.5		1.9	75.	2.	17.	13.
20000.	383.	37.	1.	.1		.6	79.	1.	6.	13.
25000.	353.	41.	1.	-0.8		-1.4	239.	2.	13.	14.
30000.	335.	53.	1.	-1.8		-3.0	239.	4.	22.	18.
35000.	294.	56.	0.	-0.7		-4.9	261.	5.	25.	22.
40000.	244.	63.	2.	.7		-6.2	277.	6.	28.	25.
45000.	218.	49.	2.	.8		-4.5	280.	5.	23.	22.
50000.	205.	41.	0.	.6		1.4	68.	1.	10.	16.
55000.	174.	35.	1.	-2.2		6.0	110.	6.	58.	11.
60000.	165.	31.	2.	-1.4		12.5	96.	13.	90.	8.
65000.	153.	31.	3.	-1.3		18.6	94.	19.	97.	7.
70000.	147.	38.	5.	-1.5		21.8	94.	22.	98.	8.
75000.	141.	42.	11.	-0.9		24.6	92.	25.	98.	7.
80000.	138.	45.	15.	-1.2		27.7	92.	28.	99.	7.
85000.	129.	51.	18.	-0.6		31.3	91.	31.	99.	8.
90000.	122.	52.	21.	-0.8		34.9	91.	35.	99.	8.
95000.	116.	57.	24.	-1.5		37.8	92.	38.	99.	8.
100000.	105.	61.	27.	-2.6		38.2	94.	39.	99.	10.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

AUGUST

GEO-METRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
4940.	384.	17.	0.	.3		.4	51.	1.	4.	12.	6.
5000.	407.	17.	0.	.2		.4	64.	0.	4.	11.	6.
6000.	407.	16.	0.	-.2		.2	144.	0.	6.	4.	7.
7000.	408.	26.	0.	-1.9		-.8	203.	2.	8.	28.	9.
8000.	408.	31.	0.	-2.3		-1.6	214.	3.	8.	33.	9.
9000.	410.	28.	0.	-1.7		-1.6	223.	2.	9.	27.	10.
10000.	410.	31.	0.	-.9		-1.4	237.	2.	9.	19.	10.
11000.	411.	32.	1.	-.5		-1.1	244.	1.	10.	13.	11.
12000.	411.	32.	1.	-.4		-.7	240.	1.	10.	8.	12.
13000.	412.	33.	1.	-.3		-.2	207.	0.	11.	3.	12.
14000.	411.	33.	1.	-.3		.2	145.	0.	11.	4.	13.
15000.	411.	32.	0.	-.4		.5	129.	1.	12.	5.	13.
16000.	410.	31.	0.	-.5		.5	137.	1.	12.	6.	13.
18000.	406.	32.	1.	-.7		-.2	199.	1.	12.	6.	14.
20000.	404.	35.	0.	-.8		-1.2	237.	1.	12.	11.	14.
25000.	385.	56.	0.	-1.0		-2.9	250.	3.	14.	21.	16.
30000.	369.	70.	1.	-.9		-5.5	261.	6.	19.	30.	21.
35000.	330.	74.	0.	.3		-7.4	272.	7.	22.	34.	24.
40000.	296.	77.	0.	1.2		-9.5	277.	10.	24.	39.	27.
45000.	260.	63.	3.	2.2		-8.1	285.	8.	22.	38.	24.
50000.	238.	45.	1.	.6		-3.4	280.	3.	15.	23.	17.
55000.	212.	28.	1.	-1.1		3.5	107.	4.	10.	36.	11.
60000.	198.	34.	0.	-1.1		10.4	96.	10.	13.	83.	9.
65000.	189.	34.	0.	-.9		15.9	93.	16.	17.	96.	8.
70000.	176.	33.	0.	-1.3		19.8	94.	20.	20.	98.	7.
75000.	166.	39.	10.	-.4		23.9	91.	24.	24.	99.	7.
80000.	158.	47.	13.	-1.5		27.1	93.	27.	27.	99.	7.
85000.	154.	45.	16.	-.7		29.5	91.	29.	30.	99.	8.
90000.	137.	56.	18.	-.3		32.6	90.	33.	33.	99.	8.
95000.	123.	55.	0.	-.6		33.9	91.	34.	34.	99.	9.
100000.	106.	55.	20.	-1.7		37.2	93.	37.	38.	99.	10.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

SEPTEMBER

GEO. ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)	RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N -S +E -W					
4940.	324.	20.	0.	.2 -.0	357.	0.	5.	4.	6.
5000.	366.	20.	0.	.0 -.2	286.	0.	5.	3.	6.
6000.	365.	23.	0.	-.3 -.9	249.	1.	7.	13.	8.
7000.	366.	38.	0.	-1.9 -2.5	233.	3.	9.	35.	10.
8000.	366.	37.	1.	-2.7 -3.6	233.	4.	10.	43.	11.
9000.	367.	32.	1.	-2.7 -4.4	239.	5.	11.	46.	12.
10000.	366.	34.	1.	-2.5 -5.2	245.	6.	12.	48.	12.
11000.	365.	42.	1.	-2.3 -6.0	249.	6.	13.	50.	13.
12000.	365.	49.	0.	-2.2 -6.8	252.	7.	14.	52.	15.
13000.	365.	63.	0.	-2.1 -7.7	255.	8.	15.	54.	16.
14000.	365.	58.	1.	-1.9 -8.3	257.	9.	16.	55.	16.
15000.	364.	61.	2.	-1.8 -9.0	259.	9.	16.	57.	17.
16000.	364.	69.	1.	-1.6 -9.8	261.	10.	17.	59.	18.
18000.	362.	78.	1.	-1.8 -11.6	261.	12.	18.	64.	19.
20000.	360.	69.	1.	-2.4 -13.6	260.	14.	20.	69.	20.
25000.	346.	86.	3.	-3.0 -18.2	261.	18.	25.	73.	24.
30000.	326.	114.	0.	-4.3 -25.1	260.	25.	33.	78.	29.
35000.	278.	113.	0.	-4.5 -34.3	262.	35.	42.	82.	32.
40000.	254.	101.	0.	-5.7 -42.4	262.	43.	48.	89.	29.
45000.	233.	100.	5.	-5.4 -39.9	262.	40.	44.	91.	26.
50000.	220.	90.	4.	-4.2 -29.1	262.	29.	33.	89.	20.
55000.	197.	55.	0.	-2.7 -13.2	259.	13.	18.	77.	15.
60000.	185.	43.	0.	-1.5 -2.0	233.	2.	10.	24.	12.
65000.	175.	28.	2.	-1.4 3.9	110.	4.	10.	42.	10.
70000.	164.	32.	1.	-.1 8.5	91.	8.	11.	76.	10.
75000.	158.	31.	1.	-.0 12.0	90.	12.	13.	89.	10.
80000.	152.	31.	2.	-.5 13.4	92.	13.	15.	92.	9.
85000.	144.	36.	0.	-.3 13.7	91.	14.	15.	89.	11.
90000.	132.	36.	0.	-.2 14.5	91.	15.	16.	91.	11.
95000.	116.	32.	0.	-.2 14.2	91.	14.	16.	87.	11.
100000.	103.	44.	0.	-1.1 15.6	94.	16.	18.	86.	13.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W			
4940.	367.	28.	0.	.4		.5	53.	1.	12.	7.
5000.	415.	28.	0.	.5		.4	38.	1.	12.	7.
6000.	415.	35.	0.	-.2		-.4	242.	0.	6.	9.
7000.	416.	45.	1.	-1.9		-2.7	235.	3.	34.	11.
8000.	416.	56.	1.	-2.0		-4.6	246.	5.	45.	12.
9000.	416.	55.	0.	-1.8		-5.9	253.	6.	50.	13.
10000.	417.	52.	0.	-1.5		-7.4	258.	8.	55.	14.
11000.	417.	52.	0.	-1.2		-8.9	262.	9.	59.	15.
12000.	417.	60.	0.	-.9		-10.3	265.	10.	61.	17.
13000.	418.	66.	0.	-.8		-11.4	266.	11.	62.	18.
14000.	418.	69.	0.	-.5		-12.0	268.	12.	62.	19.
15000.	416.	73.	0.	-.3		-12.6	268.	13.	61.	21.
16000.	416.	77.	0.	-.3		-13.0	269.	13.	61.	21.
18000.	415.	84.	0.	.0		-14.2	270.	14.	61.	24.
20000.	411.	90.	1.	-.1		-15.7	270.	16.	62.	25.
25000.	389.	122.	0.	-.8		-19.9	268.	20.	65.	30.
30000.	364.	144.	0.	-2.4		-25.0	264.	25.	66.	37.
35000.	316.	116.	0.	-3.9		-32.0	263.	32.	72.	40.
40000.	289.	121.	0.	-2.6		-38.6	266.	39.	78.	41.
45000.	256.	124.	2.	-1.8		-39.2	267.	47.	84.	33.
50000.	248.	89.	0.	-1.3		-30.4	268.	30.	87.	25.
55000.	221.	86.	0.	1.2		-19.9	273.	20.	84.	19.
60000.	213.	86.	0.	.8		-6.9	276.	7.	55.	14.
65000.	202.	86.	1.	.1		-4.3	271.	4.	42.	13.
70000.	196.	48.	0.	.4		-1.8	283.	2.	21.	10.
75000.	186.	42.	0.	-.3		-.9	255.	1.	9.	12.
80000.	175.	39.	0.	.4		-2.5	280.	3.	23.	13.
85000.	165.	42.	0.	.4		-5.1	275.	5.	40.	14.
90000.	152.	55.	0.	.0		-10.2	270.	10.	62.	17.
95000.	134.	49.	0.	.6		-13.1	273.	13.	69.	19.
100000.	114.	53.	0.	-1.3		-16.1	265.	16.	75.	20.

TABLE II (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

NOVEMBER

GEO-METRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
4940.	348.	56.	0.	.9		-.1	351.	1.	5.	16.	8.
5000.	406.	55.	0.	1.0		-.3	342.	1.	5.	19.	8.
6000.	405.	41.	0.	1.2		-1.7	306.	2.	9.	24.	10.
7000.	405.	68.	0.	.1		-4.3	271.	4.	12.	34.	14.
8000.	406.	67.	1.	.4		-7.0	273.	7.	15.	46.	16.
9000.	407.	64.	2.	1.1		-9.2	277.	9.	17.	55.	17.
10000.	407.	71.	2.	1.7		-11.5	279.	12.	19.	61.	18.
11000.	408.	74.	1.	2.2		-13.5	279.	14.	21.	65.	19.
12000.	405.	80.	1.	2.5		-15.5	279.	16.	23.	68.	20.
13000.	404.	82.	1.	2.5		-17.3	278.	18.	25.	70.	22.
14000.	404.	84.	1.	2.5		-19.0	277.	19.	27.	71.	23.
15000.	403.	85.	1.	2.5		-20.7	277.	21.	29.	72.	25.
16000.	403.	86.	1.	2.5		-22.1	276.	22.	31.	72.	26.
18000.	402.	109.	1.	3.0		-25.0	277.	25.	35.	72.	30.
20000.	391.	121.	0.	3.3		-27.4	277.	28.	38.	72.	33.
25000.	345.	122.	0.	2.8		-34.6	275.	35.	48.	73.	41.
30000.	322.	138.	0.	2.7		-41.6	274.	42.	56.	74.	47.
35000.	293.	137.	0.	1.9		-45.2	272.	45.	58.	78.	48.
40000.	233.	139.	0.	.7		-52.6	271.	53.	63.	84.	44.
45000.	211.	134.	7.	-.2		-51.2	270.	51.	58.	88.	36.
50000.	193.	89.	0.	-.4		-41.6	269.	42.	47.	88.	29.
55000.	164.	76.	0.	-1.7		-33.1	267.	33.	37.	89.	24.
60000.	152.	66.	0.	-.3		-20.2	269.	20.	25.	82.	19.
65000.	148.	56.	0.	.1		-13.5	271.	13.	18.	75.	16.
70000.	143.	48.	2.	1.4		-10.7	277.	11.	16.	66.	16.
75000.	134.	59.	2.	1.4		-10.8	277.	11.	16.	66.	16.
80000.	130.	62.	0.	1.4		-14.6	275.	15.	20.	74.	19.
85000.	122.	78.	1.	.6		-17.8	272.	18.	23.	78.	21.
90000.	112.	86.	0.	-1.7		-23.3	266.	23.	29.	81.	26.
95000.	93.	117.	0.	-3.4		-30.2	264.	30.	34.	89.	29.
100000.	73.	121.	0.	-3.3		-35.1	265.	35.	40.	89.	32.

TABLE 11 (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY MONTHS
STATION: SITE
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	+E	-W				
4940.	296.	22.	0.	1.1		-0.3	344.	1.	4.	29.	6.
5000.	320.	22.	0.	1.3		-0.4	341.	1.	4.	31.	6.
6000.	321.	31.	0.	1.5		-2.0	306.	3.	8.	30.	9.
7000.	321.	44.	0.	-0.5		-5.3	264.	5.	12.	44.	13.
8000.	321.	51.	1.	-0.8		-0.1	264.	8.	15.	54.	15.
9000.	326.	52.	1.	0.2		-10.6	271.	11.	17.	62.	16.
10000.	327.	54.	0.	1.1		-13.1	275.	13.	19.	68.	18.
11000.	327.	65.	0.	1.5		-15.7	275.	16.	22.	71.	20.
12000.	327.	64.	0.	1.5		-18.0	275.	18.	25.	73.	22.
13000.	327.		3.	1.2		-20.2	273.	20.	27.	74.	24.
14000.	327.	75.	3.	0.8		-21.9	272.	22.	29.	74.	25.
15000.	326.	61.	2.	0.6		-23.2	271.	23.	31.	75.	27.
16000.	326.	82.	0.	0.6		-24.5	271.	24.	33.	75.	28.
18000.	324.	104.	0.	0.2		-27.4	270.	27.	35.	76.	31.
20000.	319.	111.	2.	-0.5		-30.4	269.	30.	40.	76.	34.
25000.	303.	164.	1.	-1.3		-39.3	268.	39.	51.	77.	44.
30000.	273.	183.	0.	-4.5		-45.6	264.	46.	58.	79.	50.
35000.	242.	162.	0.	-5.5		-47.9	263.	48.	61.	79.	54.
40000.	215.	156.	3.	-4.9		-53.2	265.	53.	63.	84.	48.
45000.	188.	133.	4.	-4.8		-49.5	264.	50.	56.	88.	36.
50000.	176.	111.	0.	-3.2		-42.5	266.	43.	48.	89.	31.
55000.	153.	100.	6.	-1.9		-37.6	267.	38.	41.	91.	26.
60000.	150.	97.	0.	-0.8		-24.2	268.	24.	28.	87.	22.
65000.	145.	74.	0.	1.9		-14.4	277.	15.	19.	77.	18.
70000.	137.	60.	2.	1.7		-11.8	278.	12.	17.	71.	17.
75000.	135.	71.	2.	2.2		-9.8	282.	10.	17.	61.	18.
80000.	132.	89.	2.	2.3		-12.1	281.	12.	19.	64.	21.
85000.	126.	100.	1.	3.0		-17.8	280.	18.	24.	75.	25.
90000.	120.	95.	1.	0.2		-24.7	270.	25.	30.	82.	27.
95000.	113.	120.	0.	-2.5		-35.4	266.	35.	40.	90.	33.
100000.	92.	125.	0.	-5.2		-47.1	264.	47.	50.	94.	37.

TABLE III
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
JANUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM,	
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	>360 <390	>390 <420
4940.	385.	10.	4.	1.	1.	2.	3.	7.	6.	4.	4.	6.	15.	37.	
5000.	448.	11.	3.	3.	1.	1.	3.	9.	6.	4.	4.	7.	18.	31.	
6000.	449.	8.	4.	5.	6.	1.	1.	7.	8.	8.	8.	15.	29.	1.	
7000.	449.	7.	4.	2.	2.	1.	3.	7.	13.	10.	13.	19.	19.	0.	
8000.	447.	6.	5.	2.	1.	1.	1.	7.	14.	14.	13.	24.	13.	0.	
9000.	451.	5.	4.	2.	1.	1.	1.	4.	14.	16.	18.	23.	11.	0.	
10000.	452.	5.	4.	2.	1.	1.	2.	2.	12.	17.	22.	20.	13.	0.	
11000.	455.	5.	4.	2.	1.	0.	1.	2.	19.	18.	23.	23.	11.	0.	
12000.	456.	4.	3.	2.	1.	0.	1.	2.	8.	18.	25.	23.	14.	0.	
13000.	456.	4.	3.	2.	1.	0.	1.	2.	7.	18.	26.	22.	14.	0.	
14000.	455.	5.	4.	1.	1.	1.	1.	2.	8.	16.	28.	22.	12.	0.	
15000.	453.	4.	4.	1.	1.	0.	0.	2.	8.	17.	28.	22.	11.	0.	
16000.	451.	6.	4.	1.	1.	0.	0.	1.	9.	19.	28.	21.	9.	0.	
18000.	446.	5.	3.	1.	1.	1.	0.	2.	9.	19.	30.	19.	10.	0.	
20000.	429.	5.	3.	1.	1.	1.	0.	2.	8.	22.	28.	17.	11.	0.	
25000.	393.	5.	3.	2.	1.	0.	1.	2.	9.	21.	23.	22.	12.	0.	
30000.	363.	6.	3.	2.	0.	1.	1.	2.	6.	26.	22.	23.	7.	0.	
35000.	321.	4.	4.	2.	1.	0.	0.	2.	7.	30.	22.	23.	8.	1.	
40000.	289.	2.	0.	3.	0.	0.	0.	0.	7.	35.	32.	20.	6.	0.	
45000.	260.	3.	1.	0.	0.	0.	0.	0.	4.	37.	37.	14.	4.	0.	
50000.	219.	1.	2.	0.	0.	0.	0.	0.	3.	43.	35.	13.	3.	0.	
55000.	179.	1.	1.	1.	0.	0.	0.	0.	3.	40.	39.	12.	4.	0.	
60000.	164.	2.	1.	1.	0.	0.	1.	4.	7.	29.	34.	16.	6.	0.	
65000.	154.	5.	5.	3.	1.	0.	0.	3.	10.	23.	28.	15.	8.	0.	
70000.	146.	11.	6.	8.	3.	2.	2.	3.	11.	13.	19.	8.	12.	0.	
75000.	139.	8.	11.	15.	8.	1.	4.	4.	7.	9.	16.	9.	8.	1.	
80000.	122.	10.	11.	20.	8.	2.	1.	2.	3.	14.	18.	8.	3.	0.	
85000.	115.	6.	15.	23.	11.	3.	0.	2.	3.	13.	17.	4.	3.	0.	
90000.	102.	3.	15.	23.	11.	4.	1.	2.	5.	13.	15.	4.	6.	0.	
95000.	96.	3.	7.	26.	11.	3.	2.	0.	2.	21.	16.	1.	7.	0.	
100000.	74.	7.	11.	23.	8.	5.	0.	3.	5.	20.	12.	1.	4.	0.	

TABLE III (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
FEBRUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												>300 <330	>330 <360	CALM.
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360			
4940.	394.	14.	7.	2.	1.	2.	4.	8.	6.	3.	3.	10.	17.	22.		
5000.	501.	15.	7.	3.	1.	2.	4.	9.	7.	4.	2.	9.	18.	21.		
6000.	499.	12.	5.	4.	5.	1.	3.	9.	11.	5.	5.	16.	24.	0.		
7000.	499.	6.	6.	1.	2.	2.	6.	8.	15.	10.	7.	18.	20.	0.		
8000.	497.	4.	5.	2.	1.	1.	3.	8.	17.	12.	11.	20.	15.	0.		
9000.	497.	4.	5.	1.	2.	1.	4.	6.	13.	18.	14.	20.	12.	0.		
10000.	498.	3.	4.	1.	1.	1.	3.	6.	9.	20.	16.	22.	12.	0.		
11000.	496.	3.	3.	1.	1.	1.	2.	4.	10.	19.	21.	19.	15.	0.		
12000.	496.	4.	3.	1.	1.	1.	1.	4.	9.	20.	24.	18.	14.	0.		
13000.	496.	5.	3.	1.	0.	1.	0.	3.	10.	21.	25.	18.	13.	0.		
14000.	495.	5.	2.	1.	0.	1.	1.	1.	9.	23.	26.	17.	14.	0.		
15000.	493.	4.	2.	1.	0.	0.	1.	2.	9.	26.	24.	18.	13.	0.		
16000.	494.	3.	3.	0.	0.	0.	1.	2.	9.	25.	26.	18.	13.	0.		
18000.	491.	4.	3.	1.	0.	0.	0.	2.	11.	26.	24.	18.	13.	0.		
20000.	478.	2.	3.	1.	0.	0.	0.	1.	10.	27.	25.	19.	11.	0.		
25000.	436.	3.	3.	0.	0.	0.	0.	1.	8.	32.	25.	16.	11.	0.		
30000.	396.	3.	2.	1.	1.	0.	1.	2.	8.	34.	26.	15.	9.	0.		
35000.	341.	3.	1.	0.	1.	0.	0.	1.	10.	36.	28.	15.	4.	1.		
40000.	309.	0.	1.	0.	0.	0.	0.	0.	9.	35.	37.	13.	4.	0.		
45000.	274.	0.	0.	0.	0.	0.	0.	0.	8.	38.	37.	13.	3.	0.		
50000.	233.	0.	0.	0.	0.	0.	0.	0.	5.	38.	45.	8.	3.	0.		
55000.	191.	1.	0.	0.	1.	0.	0.	1.	5.	38.	43.	10.	2.	0.		
60000.	175.	2.	1.	1.	0.	0.	1.	2.	6.	34.	33.	17.	5.	0.		
65000.	157.	3.	4.	2.	1.	1.	3.	1.	4.	22.	34.	17.	7.	1.		
70000.	131.	5.	7.	11.	5.	0.	2.	2.	6.	15.	27.	14.	7.	0.		
75000.	122.	7.	10.	16.	4.	1.	2.	2.	4.	16.	26.	9.	4.	0.		
80000.	111.	3.	12.	23.	4.	2.	2.	0.	5.	14.	24.	8.	4.	0.		
85000.	107.	0.	8.	22.	6.	3.	2.	3.	7.	21.	23.	2.	3.	0.		
90000.	100.	4.	7.	21.	5.	1.	0.	2.	13.	17.	26.	2.	2.	0.		
95000.	95.	6.	3.	19.	9.	0.	4.	0.	12.	25.	24.	3.	3.	0.		
100000.	73.	3.	5.	23.	7.	0.	0.	3.	3.	32.	19.	1.	4.	0.		

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM.		
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	CALM.
4940.	415.	12.	6.	3.	1.	3.	7.	17.	10.	6.	5.	5.	8.	16.
5000.	505.	10.	7.	4.	1.	3.	7.	17.	10.	7.	4.	6.	12.	14.
6000.	506.	7.	5.	3.	4.	3.	6.	17.	14.	7.	8.	12.	14.	0.
7000.	506.	4.	4.	2.	1.	2.	6.	17.	20.	10.	10.	11.	12.	0.
8000.	506.	3.	3.	1.	1.	2.	6.	14.	19.	15.	10.	16.	9.	0.
9000.	506.	2.	2.	1.	1.	2.	5.	11.	20.	20.	11.	17.	9.	0.
10000.	505.	1.	2.	1.	1.	1.	3.	9.	21.	21.	16.	17.	8.	0.
11000.	502.	2.	1.	1.	1.	1.	3.	6.	19.	22.	23.	16.	6.	0.
12000.	502.	3.	0.	1.	1.	1.	1.	5.	17.	25.	25.	17.	4.	0.
13000.	502.	2.	1.	1.	1.	1.	1.	4.	16.	29.	26.	15.	5.	0.
14000.	500.	2.	1.	0.	0.	1.	1.	3.	13.	32.	27.	14.	4.	0.
15000.	500.	2.	1.	0.	0.	0.	1.	3.	13.	34.	26.	15.	4.	0.
16000.	500.	2.	1.	0.	1.	0.	1.	4.	12.	34.	29.	12.	4.	0.
18000.	499.	2.	1.	1.	0.	0.	0.	3.	11.	34.	31.	13.	4.	0.
20000.	490.	1.	1.	1.	0.	0.	0.	2.	11.	39.	28.	13.	3.	0.
25000.	441.	1.	0.	1.	0.	0.	0.	2.	14.	42.	26.	10.	3.	0.
30000.	397.	1.	1.	1.	0.	0.	0.	2.	14.	42.	26.	10.	4.	0.
35000.	329.	2.	0.	1.	0.	0.	0.	1.	14.	43.	28.	9.	2.	1.
40000.	269.	0.	1.	1.	0.	0.	0.	0.	10.	45.	30.	8.	3.	2.
45000.	242.	0.	0.	0.	0.	0.	0.	0.	7.	52.	29.	8.	0.	2.
50000.	208.	0.	0.	0.	0.	0.	0.	0.	8.	55.	29.	4.	1.	1.
55000.	173.	0.	0.	0.	0.	0.	0.	1.	8.	47.	39.	5.	1.	0.
60000.	152.	0.	0.	0.	1.	2.	2.	5.	14.	35.	33.	7.	2.	0.
65000.	136.	1.	2.	1.	2.	2.	3.	7.	13.	33.	24.	10.	2.	0.
70000.	129.	3.	5.	6.	7.	2.	3.	3.	12.	26.	18.	11.	2.	1.
75000.	117.	3.	5.	10.	13.	6.	3.	3.	5.	23.	16.	6.	7.	0.
80000.	107.	5.	7.	14.	7.	6.	3.	4.	8.	28.	10.	4.	4.	0.
85000.	102.	3.	4.	13.	14.	3.	1.	5.	6.	28.	16.	2.	5.	1.
90000.	91.	1.	3.	13.	9.	1.	2.	0.	9.	33.	25.	1.	2.	0.
95000.	83.	0.	2.	11.	10.	2.	2.	0.	5.	43.	18.	6.	0.	0.
100000.	62.	0.	0.	6.	18.	3.	0.	0.	3.	39.	26.	3.	0.	2.

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FT,	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM.
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	
4940.	444.	9.	12.	4.	2.	1.	7.	13.	12.	7.	3.	3.	10.	16.
5000.	559.	10.	9.	4.	2.	2.	6.	17.	12.	7.	4.	4.	11.	14.
6000.	559.	7.	4.	6.	4.	3.	4.	20.	14.	9.	6.	8.	14.	1.
7000.	559.	6.	3.	4.	1.	3.	4.	20.	20.	12.	6.	8.	11.	0.
8000.	558.	3.	3.	3.	2.	1.	4.	19.	23.	15.	8.	10.	10.	0.
9000.	559.	3.	2.	3.	1.	2.	4.	14.	25.	18.	10.	11.	9.	0.
10000.	559.	2.	3.	2.	1.	1.	3.	11.	25.	22.	13.	12.	5.	0.
11000.	559.	3.	2.	2.	1.	2.	3.	9.	23.	25.	16.	11.	4.	0.
12000.	559.	2.	1.	1.	1.	2.	3.	7.	19.	30.	18.	11.	4.	0.
13000.	559.	1.	1.	1.	1.	2.	3.	6.	20.	31.	18.	11.	5.	0.
14000.	560.	2.	1.	0.	0.	1.	3.	7.	20.	33.	19.	10.	4.	0.
15000.	560.	1.	1.	0.	0.	1.	2.	5.	19.	37.	18.	10.	5.	0.
16000.	559.	2.	1.	0.	1.	0.	2.	5.	15.	39.	21.	9.	5.	0.
18000.	552.	2.	0.	0.	0.	0.	2.	5.	15.	41.	19.	9.	7.	0.
20000.	526.	2.	0.	0.	0.	1.	2.	4.	16.	43.	16.	10.	6.	1.
25000.	482.	1.	1.	0.	0.	1.	1.	4.	17.	44.	17.	8.	6.	0.
30000.	453.	2.	1.	1.	0.	0.	1.	4.	16.	46.	17.	8.	4.	2.
35000.	353.	1.	0.	0.	0.	0.	0.	3.	14.	46.	19.	8.	4.	2.
40000.	290.	0.	0.	0.	0.	0.	0.	3.	16.	51.	19.	4.	3.	3.
45000.	255.	0.	0.	0.	0.	0.	0.	1.	18.	51.	24.	5.	0.	0.
50000.	230.	0.	0.	0.	0.	0.	0.	1.	18.	50.	27.	3.	0.	0.
55000.	192.	0.	0.	0.	0.	0.	1.	3.	20.	49.	23.	4.	0.	0.
60000.	173.	1.	2.	1.	0.	0.	2.	6.	21.	40.	23.	3.	1.	1.
65000.	162.	1.	2.	4.	6.	4.	6.	6.	19.	25.	14.	10.	2.	2.
70000.	147.	3.	8.	14.	12.	8.	8.	9.	6.	11.	11.	8.	3.	0.
75000.	140.	5.	6.	14.	11.	5.	9.	7.	7.	19.	11.	4.	2.	0.
80000.	125.	4.	5.	10.	16.	6.	7.	7.	11.	15.	9.	7.	2.	0.
85000.	116.	4.	4.	7.	11.	3.	3.	8.	15.	21.	13.	7.	3.	2.
90000.	110.	3.	2.	3.	6.	5.	4.	5.	12.	35.	15.	8.	1.	1.
95000.	98.	3.	1.	6.	1.	0.	1.	5.	11.	41.	18.	4.	4.	4.
100000.	73.	1.	0.	0.	0.	3.	0.	0.	14.	34.	37.	7.	1.	3.

TABLE III (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
MAY

GEOMETRIC ALTITUDE M'SL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM.	
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	CALM.	
4940.	443.	12.	5.	5.	2.	3.	6.	18.	12.	7.	2.	4.	6.	17.	
5000.	488.	11.	3.	5.	2.	2.	7.	18.	13.	7.	1.	4.	11.	15.	
6000.	488.	6.	4.	6.	3.	4.	6.	19.	16.	6.	5.	10.	15.	0.	
7000.	488.	3.	3.	3.	2.	4.	7.	24.	18.	8.	6.	9.	12.	0.	
8000.	488.	2.	3.	2.	2.	2.	7.	22.	24.	9.	6.	10.	11.	0.	
9000.	490.	2.	3.	2.	1.	2.	6.	20.	26.	11.	10.	9.	7.	0.	
10000.	491.	2.	3.	1.	1.	2.	5.	17.	27.	16.	10.	9.	7.	0.	
11000.	488.	3.	2.	1.	1.	1.	5.	14.	27.	21.	10.	11.	4.	0.	
12000.	487.	4.	1.	1.	1.	2.	4.	12.	29.	20.	14.	10.	3.	0.	
13000.	485.	3.	0.	1.	2.	1.	3.	12.	27.	25.	15.	7.	3.	0.	
14000.	483.	3.	2.	1.	2.	1.	2.	11.	27.	27.	15.	6.	4.	0.	
15000.	479.	4.	2.	1.	1.	1.	2.	9.	27.	29.	17.	5.	3.	0.	
16000.	478.	3.	2.	2.	2.	1.	1.	9.	24.	32.	17.	5.	3.	0.	
18000.	474.	3.	2.	1.	1.	0.	1.	6.	24.	35.	17.	5.	4.	0.	
20000.	464.	3.	1.	1.	0.	1.	1.	3.	23.	37.	18.	7.	4.	0.	
25000.	449.	2.	1.	0.	0.	0.	1.	3.	18.	43.	19.	7.	4.	0.	
30000.	416.	2.	0.	1.	0.	1.	1.	2.	18.	42.	21.	7.	4.	2.	
35000.	333.	1.	1.	1.	0.	1.	1.	3.	15.	48.	18.	7.	3.	2.	
40000.	285.	1.	0.	1.	0.	0.	0.	1.	12.	54.	19.	7.	2.	2.	
45000.	269.	0.	0.	0.	0.	0.	0.	1.	11.	58.	22.	6.	1.	1.	
50000.	232.	0.	0.	0.	0.	0.	0.	0.	13.	56.	23.	6.	1.	0.	
55000.	188.	0.	1.	0.	0.	0.	2.	3.	16.	44.	25.	6.	4.	0.	
60000.	174.	2.	1.	3.	3.	4.	4.	10.	13.	26.	18.	7.	7.	1.	
65000.	154.	6.	7.	14.	8.	10.	4.	5.	14.	12.	6.	9.	5.	0.	
70000.	142.	8.	12.	18.	18.	6.	11.	2.	6.	4.	4.	5.	4.	1.	
75000.	133.	5.	12.	23.	23.	11.	6.	2.	4.	3.	1.	6.	4.	0.	
80000.	127.	2.	7.	31.	22.	8.	6.	5.	5.	6.	2.	4.	2.	0.	
85000.	121.	5.	8.	27.	22.	7.	3.	9.	5.	7.	2.	2.	1.	1.	
90000.	115.	3.	7.	23.	16.	5.	6.	8.	11.	10.	8.	3.	1.	0.	
95000.	99.	2.	8.	16.	20.	6.	5.	1.	11.	18.	7.	0.	3.	2.	
100000.	76.	5.	5.	13.	16.	5.	9.	1.	19.	16.	8.	4.	5.	3.	

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM.
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	
4940.	343.	9.	8.	2.	3.	3.	8.	20.	15.	7.	2.	3.	5.	15.
5000.	369.	8.	6.	2.	4.	2.	8.	20.	15.	6.	2.	4.	7.	15.
6000.	370.	8.	4.	5.	6.	3.	6.	25.	14.	7.	8.	6.	8.	0.
7000.	369.	6.	2.	4.	4.	4.	8.	26.	19.	8.	6.	5.	7.	0.
8000.	370.	4.	3.	2.	2.	4.	9.	26.	24.	8.	5.	5.	8.	0.
9000.	370.	5.	3.	2.	2.	3.	8.	22.	27.	10.	4.	6.	7.	0.
10000.	373.	6.	3.	2.	2.	3.	5.	21.	27.	13.	5.	9.	5.	0.
11000.	373.	4.	3.	2.	3.	3.	5.	15.	24.	21.	6.	7.	8.	0.
12000.	375.	3.	4.	4.	2.	1.	4.	12.	26.	19.	10.	7.	7.	0.
13000.	373.	5.	5.	4.	1.	2.	3.	11.	26.	21.	9.	8.	5.	0.
14000.	373.	5.	4.	3.	3.	1.	3.	11.	27.	21.	8.	8.	6.	0.
15000.	371.	6.	5.	3.	2.	1.	3.	11.	26.	23.	8.	7.	4.	1.
16000.	370.	4.	5.	5.	2.	1.	2.	12.	27.	22.	8.	7.	5.	1.
18000.	367.	2.	6.	5.	2.	0.	2.	10.	26.	23.	11.	5.	6.	0.
20000.	360.	2.	6.	3.	2.	1.	2.	10.	23.	28.	11.	6.	6.	0.
25000.	333.	5.	4.	1.	2.	0.	2.	7.	25.	27.	9.	7.	6.	0.
30000.	309.	7.	3.	1.	0.	1.	2.	6.	21.	31.	14.	7.	5.	1.
35000.	257.	5.	1.	1.	0.	0.	2.	7.	16.	38.	16.	7.	7.	2.
40000.	220.	4.	1.	0.	0.	0.	0.	6.	15.	39.	16.	6.	10.	1.
45000.	203.	3.	0.	0.	0.	0.	0.	3.	17.	41.	17.	9.	8.	0.
50000.	191.	3.	2.	0.	0.	1.	2.	4.	20.	35.	19.	9.	4.	1.
55000.	171.	5.	5.	0.	2.	2.	4.	11.	19.	28.	13.	7.	4.	0.
60000.	158.	3.	9.	9.	17.	15.	13.	11.	7.	4.	1.	4.	3.	1.
65000.	139.	1.	8.	29.	33.	22.	4.	1.	0.	1.	1.	1.	0.	0.
70000.	133.	0.	2.	38.	48.	9.	4.	0.	0.	1.	0.	0.	0.	0.
75000.	128.	0.	1.	39.	54.	5.	0.	1.	0.	0.	0.	0.	0.	1.
80000.	124.	0.	2.	35.	57.	4.	0.	0.	0.	1.	0.	0.	1.	0.
85000.	118.	0.	1.	42.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	112.	1.	1.	38.	54.	4.	0.	1.	1.	0.	0.	0.	0.	0.
95000.	100.	0.	1.	37.	54.	5.	0.	0.	1.	0.	0.	0.	0.	1.
100000.	85.	1.	2.	27.	61.	5.	1.	1.	0.	0.	0.	0.	0.	1.

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												>300 <330	>330 <360	CALM
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360			
4940.	363.	12.	10.	6.	4.	4.	7.	14.	6.	3.	2.	2.	4.	25.		
5000.	386.	10.	11.	5.	3.	6.	9.	13.	6.	3.	2.	3.	8.	22.		
6000.	386.	7.	7.	11.	10.	7.	9.	15.	8.	5.	5.	5.	10.	2.		
7000.	386.	6.	5.	4.	5.	9.	12.	18.	16.	8.	4.	5.	6.	1.		
8000.	386.	7.	4.	4.	5.	7.	13.	17.	16.	10.	8.	6.	4.	0.		
9000.	388.	6.	5.	3.	6.	9.	10.	11.	16.	11.	6.	9.	6.	0.		
10000.	389.	7.	4.	8.	6.	4.	10.	12.	12.	11.	7.	11.	7.	1.		
11000.	391.	4.	8.	8.	7.	6.	11.	9.	9.	8.	9.	11.	9.	0.		
12000.	392.	7.	7.	10.	9.	8.	7.	8.	9.	7.	9.	10.	9.	0.		
13000.	392.	8.	6.	10.	12.	7.	6.	10.	8.	4.	7.	11.	11.	0.		
14000.	392.	9.	6.	14.	11.	8.	6.	7.	9.	4.	5.	9.	10.	0.		
15000.	391.	9.	7.	14.	11.	10.	5.	8.	9.	5.	4.	7.	10.	0.		
16000.	390.	10.	6.	15.	9.	10.	7.	9.	8.	4.	5.	6.	11.	0.		
18000.	388.	7.	8.	15.	10.	6.	9.	7.	10.	4.	5.	10.	9.	0.		
20000.	383.	7.	5.	14.	9.	7.	7.	8.	11.	5.	8.	10.	7.	0.		
25000.	353.	6.	8.	8.	7.	4.	10.	9.	11.	13.	8.	7.	7.	0.		
30000.	335.	6.	7.	9.	8.	7.	6.	13.	8.	13.	12.	7.	6.	0.		
35000.	294.	5.	9.	5.	9.	4.	4.	12.	8.	12.	15.	8.	7.	1.		
40000.	244.	5.	8.	3.	7.	5.	8.	7.	9.	11.	15.	13.	11.	0.		
45000.	218.	6.	9.	6.	6.	4.	6.	12.	9.	8.	12.	11.	12.	0.		
50000.	205.	8.	9.	10.	11.	8.	8.	9.	8.	6.	9.	6.	6.	1.		
55000.	174.	7.	9.	15.	24.	14.	13.	6.	5.	2.	2.	3.	1.	0.		
60000.	165.	1.	5.	30.	44.	13.	2.	1.	1.	0.	1.	1.	0.	0.		
65000.	153.	0.	1.	36.	59.	3.	0.	0.	0.	0.	0.	0.	0.	0.		
70000.	147.	0.	1.	32.	63.	4.	0.	0.	0.	0.	0.	0.	0.	0.		
75000.	141.	0.	0.	36.	61.	3.	0.	0.	0.	0.	0.	0.	0.	0.		
80000.	138.	0.	0.	36.	62.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
85000.	129.	0.	0.	43.	57.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
90000.	122.	0.	0.	40.	60.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
95000.	116.	0.	0.	36.	64.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
100000.	105.	0.	0.	30.	70.	0.	0.	0.	0.	0.	0.	0.	0.	1.		

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STATION SITE
 PERIOD OF RECORD 1961-1973
 AUGUST

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												>330 -<360	CALM,
		>360 -<30	>30 -<60	>60 -<90	>90 -<120	>120 -<150	>150 -<180	>180 -<210	>210 -<240	>240 -<270	>270 -<300	>300 -<330	>330 -<360		
4940.	384.	15.	10.	4.	4.	4.	5.	11.	7.	4.	2.	2.	9.	22.	
5000.	407.	10.	9.	5.	4.	4.	6.	13.	6.	3.	1.	3.	13.	22.	
6000.	407.	8.	8.	10.	8.	6.	6.	15.	7.	4.	7.	6.	14.	1.	
7000.	408.	4.	5.	6.	7.	5.	11.	19.	14.	7.	5.	7.	10.	1.	
8000.	408.	5.	5.	5.	7.	4.	10.	18.	16.	8.	8.	8.	6.	1.	
9000.	410.	6.	4.	8.	6.	5.	8.	17.	13.	8.	9.	11.	6.	0.	
10000.	410.	9.	4.	8.	7.	5.	8.	10.	13.	8.	10.	10.	7.	0.	
11000.	411.	8.	5.	10.	6.	7.	7.	9.	11.	9.	8.	11.	8.	0.	
12000.	411.	8.	7.	10.	8.	8.	7.	9.	10.	9.	9.	9.	9.	0.	
13000.	412.	9.	7.	11.	9.	9.	6.	8.	8.	8.	8.	9.	7.	0.	
14000.	411.	9.	8.	14.	10.	8.	5.	7.	10.	8.	8.	8.	5.	0.	
15000.	411.	7.	9.	13.	10.	9.	7.	7.	10.	8.	9.	5.	6.	0.	
16000.	410.	8.	10.	12.	10.	8.	8.	7.	11.	8.	9.	4.	5.	0.	
18000.	406.	7.	9.	10.	8.	9.	8.	8.	13.	8.	8.	5.	6.	0.	
20000.	404.	8.	9.	10.	4.	8.	7.	10.	12.	11.	7.	8.	5.	0.	
25000.	385.	6.	1.	5.	6.	6.	7.	11.	13.	12.	6.	7.	9.	0.	
30000.	369.	7.	7.	3.	7.	5.	5.	10.	13.	15.	7.	10.	10.	0.	
35000.	330.	8.	5.	4.	6.	5.	4.	6.	15.	15.	9.	11.	11.	0.	
40000.	296.	8.	5.	4.	5.	5.	4.	6.	8.	22.	8.	10.	14.	0.	
45000.	260.	11.	8.	4.	5.	4.	5.	6.	8.	15.	15.	8.	11.	0.	
50000.	238.	10.	9.	5.	6.	5.	7.	6.	13.	12.	6.	9.	11.	0.	
55000.	212.	7.	11.	13.	19.	11.	8.	8.	16.	5.	3.	5.	5.	0.	
60000.	198.	3.	8.	31.	32.	12.	8.	4.	2.	0.	0.	1.	1.	1.	
65000.	189.	1.	1.	38.	52.	7.	1.	0.	0.	0.	0.	0.	0.	1.	
70000.	176.	0.	0.	34.	64.	2.	0.	0.	0.	0.	0.	0.	0.	1.	
75000.	164.	0.	0.	42.	57.	1.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	158.	0.	0.	36.	63.	1.	0.	0.	0.	0.	0.	0.	0.	0.	
85000.	154.	0.	0.	44.	56.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
90000.	137.	0.	0.	48.	52.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
95000.	123.	0.	0.	38.	59.	2.	0.	0.	0.	0.	0.	0.	0.	1.	
100000.	106.	0.	1.	29.	69.	1.	0.	0.	0.	0.	0.	0.	0.	0.	

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STATION SITE
 PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT.	TO. AL OBS	WIND DIRECTIONS (DEGREES)												>270 ≤300	>300 ≤330	>330 ≤360	CALM.
		>360 ≤30	>30 ≤60	>60 ≤90	>90 ≤120	>120 ≤150	>150 ≤180	>180 ≤210	>210 ≤240	>240 ≤270	>270 ≤300	>300 ≤330	>330 ≤360				
4940.	324.	11.	10.	5.	4.	3.	5.	10.	10.	4.	3.	3.	3.	3.	7.	24.	
5000.	366.	10.	8.	4.	3.	2.	5.	12.	10.	5.	4.	3.	3.	4.	11.	21.	
6000.	365.	8.	7.	6.	7.	5.	5.	14.	10.	3.	10.	9.	10.	10.	13.	1.	
7000.	366.	5.	5.	6.	3.	2.	9.	15.	21.	7.	7.	8.	7.	7.	11.	1.	
8000.	366.	5.	5.	5.	3.	3.	5.	20.	20.	10.	7.	7.	9.	9.	9.	0.	
9000.	367.	4.	5.	4.	4.	2.	6.	16.	22.	10.	10.	10.	9.	9.	8.	0.	
10000.	366.	3.	5.	4.	3.	4.	6.	12.	22.	13.	12.	12.	10.	10.	6.	0.	
11000.	365.	4.	5.	3.	2.	6.	6.	9.	17.	20.	13.	13.	10.	10.	5.	0.	
12000.	365.	3.	5.	2.	4.	5.	6.	8.	14.	22.	15.	15.	10.	10.	5.	0.	
13000.	365.	4.	5.	2.	4.	6.	4.	8.	16.	22.	16.	16.	8.	8.	5.	0.	
14000.	365.	5.	4.	3.	3.	5.	4.	7.	16.	21.	16.	16.	8.	8.	6.	0.	
15000.	364.	4.	3.	4.	2.	5.	5.	7.	15.	22.	16.	16.	8.	8.	8.	0.	
16000.	364.	4.	4.	1.	4.	5.	5.	6.	16.	21.	16.	16.	10.	10.	7.	0.	
18000.	362.	4.	3.	1.	2.	5.	6.	5.	17.	24.	17.	17.	10.	10.	6.	0.	
20000.	360.	5.	2.	1.	0.	2.	4.	10.	17.	24.	17.	17.	12.	12.	4.	0.	
25000.	346.	4.	2.	0.	1.	2.	3.	6.	21.	27.	15.	15.	13.	13.	7.	0.	
30000.	326.	3.	2.	0.	1.	1.	2.	9.	19.	28.	21.	21.	10.	10.	5.	1.	
35000.	278.	3.	1.	1.	0.	0.	0.	5.	17.	35.	26.	26.	7.	7.	4.	0.	
40000.	254.	0.	1.	0.	0.	0.	0.	2.	16.	40.	31.	31.	5.	5.	3.	0.	
45000.	233.	0.	0.	0.	0.	1.	0.	4.	14.	41.	33.	33.	5.	5.	1.	0.	
50000.	220.	1.	1.	0.	0.	0.	0.	5.	12.	40.	35.	35.	5.	5.	1.	0.	
55000.	197.	2.	3.	1.	2.	2.	1.	12.	18.	24.	29.	29.	4.	4.	5.	1.	
60000.	185.	4.	8.	9.	9.	7.	9.	4.	11.	15.	11.	11.	5.	5.	8.	1.	
65000.	175.	4.	7.	17.	26.	13.	5.	5.	8.	3.	6.	6.	3.	3.	3.	0.	
70000.	164.	3.	7.	34.	25.	12.	4.	4.	2.	2.	1.	1.	2.	2.	4.	0.	
75000.	158.	3.	3.	37.	35.	10.	4.	1.	2.	0.	1.	1.	1.	1.	1.	0.	
80000.	152.	1.	5.	39.	40.	9.	4.	1.	0.	0.	0.	0.	1.	1.	1.	0.	
85000.	144.	2.	4.	35.	40.	8.	3.	2.	1.	1.	1.	1.	1.	1.	0.	1.	
90000.	132.	0.	5.	39.	40.	7.	3.	2.	2.	1.	0.	0.	2.	2.	0.	1.	
95000.	116.	2.	6.	35.	37.	5.	3.	4.	2.	2.	1.	1.	0.	0.	0.	1.	
100000.	103.	1.	2.	34.	41.	9.	3.	2.	4.	0.	1.	1.	0.	0.	0.	1.	

TABLE III (CONT.)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM.		
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	
4940.	367.	14.	10.	5.	2.	3.	5.	14.	7.	3.	2.	1.	6.	26.
5000.	415.	14.	8.	6.	2.	3.	6.	14.	7.	3.	1.	1.	11.	23.
6000.	415.	4.	6.	10.	7.	4.	8.	16.	9.	4.	6.	8.	18.	0.
7000.	416.	3.	3.	4.	3.	5.	7.	20.	17.	9.	6.	9.	14.	0.
8000.	416.	3.	3.	3.	2.	3.	6.	14.	24.	11.	10.	11.	9.	0.
9000.	416.	2.	4.	3.	1.	3.	6.	13.	19.	16.	12.	12.	10.	0.
10000.	417.	3.	4.	3.	2.	1.	4.	12.	20.	16.	13.	14.	8.	0.
11000.	417.	4.	3.	2.	2.	1.	3.	9.	20.	19.	14.	14.	8.	0.
12000.	417.	3.	4.	2.	1.	2.	3.	7.	18.	20.	15.	15.	8.	0.
13000.	418.	3.	4.	3.	1.	2.	3.	7.	17.	20.	17.	13.	10.	0.
14000.	418.	4.	3.	3.	1.	2.	2.	7.	18.	20.	15.	11.	14.	0.
15000.	416.	4.	3.	2.	2.	1.	2.	6.	17.	19.	17.	11.	15.	0.
16000.	416.	4.	3.	3.	2.	1.	1.	7.	14.	23.	16.	10.	15.	0.
18000.	415.	9.	2.	2.	1.	1.	2.	5.	17.	22.	17.	9.	13.	0.
20000.	411.	8.	4.	2.	2.	1.	1.	6.	15.	24.	19.	7.	11.	0.
25000.	389.	7.	5.	2.	0.	2.	1.	8.	16.	21.	20.	10.	7.	1.
30000.	364.	7.	4.	2.	1.	2.	1.	4.	19.	24.	17.	12.	6.	2.
35000.	316.	7.	5.	1.	1.	1.	1.	2.	15.	33.	21.	9.	3.	3.
40000.	289.	6.	1.	2.	0.	1.	1.	0.	11.	36.	23.	11.	4.	3.
45000.	256.	5.	0.	0.	0.	0.	1.	0.	9.	41.	32.	7.	5.	0.
50000.	248.	3.	1.	0.	0.	0.	0.	1.	9.	40.	29.	12.	4.	2.
55000.	221.	3.	0.	0.	0.	0.	0.	2.	11.	31.	28.	17.	7.	1.
60000.	213.	8.	1.	3.	2.	3.	5.	6.	15.	13.	15.	17.	10.	0.
65000.	202.	6.	6.	3.	5.	4.	5.	9.	10.	16.	11.	9.	14.	0.
70000.	196.	7.	7.	9.	6.	10.	3.	5.	9.	12.	13.	12.	7.	1.
75000.	186.	5.	4.	16.	11.	6.	2.	6.	8.	16.	13.	8.	4.	1.
80000.	175.	5.	6.	13.	11.	9.	1.	2.	6.	22.	14.	5.	6.	1.
85000.	165.	4.	8.	10.	10.	6.	2.	4.	7.	15.	22.	8.	4.	1.
90000.	152.	4.	4.	5.	7.	4.	5.	4.	3.	26.	25.	7.	5.	1.
95000.	134.	4.	3.	8.	7.	2.	3.	1.	5.	22.	33.	5.	4.	3.
100000.	114.	5.	2.	4.	5.	5.	2.	6.	4.	29.	29.	4.	2.	4.

TABLE III (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 NOVEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)										CALM.		
		>360 <30	>30 <60	>60 <90	>90 <120	>120 <150	>150 <180	>180 <210	>210 <240	>240 <270	>270 <300	>300 <330	>330 <360	CALM.
4940.	348.	14.	10.	4.	1.	1.	5.	11.	8.	4.	2.	3.	12.	24.
5000.	406.	16.	8.	4.	0.	1.	4.	10.	10.	4.	2.	4.	16.	21.
6000.	405.	11.	4.	6.	5.	1.	2.	10.	13.	6.	7.	11.	22.	0.
7000.	405.	8.	5.	3.	1.	2.	4.	14.	17.	11.	5.	13.	17.	0.
8000.	406.	6.	4.	2.	1.	0.	4.	11.	16.	14.	9.	17.	15.	0.
9000.	407.	5.	3.	1.	1.	1.	1.	10.	17.	17.	9.	19.	14.	0.
10000.	407.	6.	2.	2.	1.	1.	1.	7.	16.	17.	13.	20.	14.	0.
11000.	408.	7.	2.	1.	0.	1.	2.	5.	15.	21.	14.	19.	12.	0.
12000.	405.	7.	2.	1.	1.	1.	1.	5.	13.	21.	17.	19.	12.	0.
13000.	404.	5.	2.	0.	1.	1.	1.	4.	13.	23.	21.	17.	12.	0.
14000.	404.	6.	1.	0.	1.	1.	0.	3.	14.	24.	20.	18.	11.	0.
15000.	403.	7.	1.	1.	1.	1.	0.	2.	15.	26.	21.	14.	11.	0.
16000.	403.	7.	1.	1.	2.	0.	0.	2.	15.	27.	20.	13.	11.	0.
18000.	402.	6.	0.	1.	1.	1.	0.	2.	15.	28.	19.	14.	12.	0.
20000.	391.	7.	1.	1.	1.	0.	0.	2.	16.	27.	19.	16.	9.	0.
25000.	345.	7.	0.	1.	1.	0.	0.	2.	13.	28.	22.	16.	10.	0.
30000.	322.	6.	0.	1.	1.	0.	0.	3.	11.	28.	26.	15.	9.	1.
35000.	293.	4.	0.	0.	0.	0.	0.	3.	9.	29.	28.	10.	9.	8.
40000.	233.	3.	0.	1.	0.	0.	0.	2.	9.	34.	27.	15.	6.	2.
45000.	211.	2.	0.	0.	0.	0.	0.	1.	9.	38.	34.	12.	2.	0.
50000.	193.	2.	0.	0.	0.	0.	0.	1.	10.	41.	30.	11.	5.	1.
55000.	164.	1.	0.	0.	0.	1.	1.	1.	10.	41.	30.	11.	2.	1.
60000.	152.	2.	0.	1.	1.	0.	1.	5.	9.	32.	30.	12.	6.	0.
65000.	148.	5.	3.	2.	3.	2.	1.	1.	11.	26.	30.	9.	5.	1.
70000.	143.	6.	5.	7.	3.	1.	1.	2.	11.	20.	29.	13.	3.	0.
75000.	134.	9.	7.	6.	1.	1.	0.	2.	7.	22.	28.	10.	7.	0.
80000.	130.	4.	8.	4.	3.	0.	1.	0.	4.	32.	25.	12.	7.	2.
85000.	122.	6.	6.	5.	1.	0.	0.	0.	5.	34.	24.	14.	6.	0.
90000.	112.	3.	4.	4.	3.	0.	0.	2.	4.	46.	21.	7.	4.	0.
95000.	93.	3.	2.	3.	2.	0.	0.	0.	8.	44.	25.	3.	6.	3.
100000.	73.	0.	0.	4.	1.	1.	0.	3.	3.	45.	29.	5.	3.	5.

TABLE III (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM	
		360 -30	30 -60	60 -90	90 -120	120 -150	150 -180	180 -210	210 -240	240 -270	270 -300	300 -330	330 -360	CALM	
4940.	296.	20.	7.	1.	1.	0.	3.	11.	6.	2.	2.	4.	8.	34.	
5000.	320.	18.	5.	2.	1.	0.	3.	11.	7.	2.	2.	7.	12.	30.	
6000.	321.	11.	5.	4.	6.	3.	1.	9.	11.	5.	9.	15.	22.	1.	
7000.	321.	6.	3.	3.	0.	0.	5.	10.	20.	11.	9.	13.	20.	1.	
8000.	321.	5.	2.	2.	2.	0.	1.	7.	24.	14.	10.	17.	16.	0.	
9000.	326.	3.	2.	2.	1.	1.	1.	4.	17.	21.	13.	21.	12.	0.	
10000.	327.	6.	1.	2.	1.	1.	2.	2.	13.	23.	20.	20.	9.	0.	
11000.	327.	5.	2.	2.	1.	1.	1.	2.	15.	20.	23.	19.	9.	0.	
12000.	327.	5.	2.	3.	1.	2.	1.	3.	14.	20.	24.	18.	7.	0.	
13000.	327.	3.	1.	3.	2.	1.	2.	2.	15.	21.	22.	18.	9.	0.	
14000.	327.	3.	1.	3.	2.	1.	1.	4.	14.	21.	25.	14.	11.	0.	
15000.	326.	4.	1.	2.	2.	1.	1.	5.	13.	24.	25.	12.	10.	0.	
16000.	326.	4.	2.	2.	1.	2.	0.	6.	12.	25.	23.	14.	9.	0.	
18000.	324.	4.	1.	2.	1.	0.	1.	4.	14.	27.	23.	15.	8.	0.	
20000.	319.	4.	1.	1.	1.	0.	1.	3.	17.	27.	21.	15.	8.	0.	
25000.	303.	2.	1.	1.	1.	1.	0.	1.	16.	29.	22.	15.	8.	0.	
30000.	273.	3.	0.	1.	1.	0.	1.	2.	17.	29.	23.	12.	8.	1.	
35000.	242.	4.	0.	2.	0.	0.	0.	0.	22.	21.	24.	11.	8.	5.	
40000.	215.	0.	1.	1.	1.	0.	0.	0.	16.	29.	31.	13.	7.	0.	
45000.	188.	1.	1.	0.	0.	0.	0.	1.	14.	37.	31.	12.	4.	0.	
50000.	176.	0.	1.	0.	0.	0.	0.	0.	14.	32.	31.	19.	2.	1.	
55000.	153.	0.	0.	0.	0.	0.	0.	1.	7.	45.	25.	16.	5.	0.	
60000.	150.	3.	1.	0.	0.	0.	0.	1.	11.	33.	29.	15.	7.	1.	
65000.	145.	3.	3.	0.	1.	0.	0.	4.	6.	26.	28.	13.	12.	1.	
70000.	137.	4.	4.	2.	4.	1.	1.	1.	8.	22.	28.	10.	9.	0.	
75000.	135.	9.	7.	4.	4.	3.	1.	3.	1.	27.	21.	9.	11.	0.	
80000.	132.	5.	11.	7.	3.	2.	0.	2.	3.	25.	23.	11.	6.	0.	
85000.	126.	5.	7.	5.	1.	2.	0.	1.	3.	29.	33.	10.	6.	0.	
90000.	120.	3.	5.	4.	2.	2.	1.	2.	1.	37.	28.	12.	2.	0.	
95000.	113.	3.	2.	2.	2.	0.	0.	0.	2.	47.	32.	7.	4.	1.	
100000.	92.	1.	1.	0.	1.	0.	1.	0.	4.	53.	30.	2.	3.	2.	

TABLE IV
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)															
			<u>> 1</u> < 10	<u>> 10</u> < 20	<u>> 20</u> < 30	<u>> 30</u> < 40	<u>> 40</u> < 50	<u>> 50</u> < 60	<u>> 60</u> < 70	<u>> 70</u> < 80	<u>> 80</u> < 90	<u>> 90</u> < 100	<u>> 100</u> < 125	<u>> 125</u> < 150	<u>> 150</u>			
4940.	385.	37.	48.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
5000.	448.	31.	51.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
6000.	449.	1.	65.	29.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
7000.	449.	0.	39.	49.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
8000.	447.	0.	23.	53.	20.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
9000.	451.	0.	16.	47.	28.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
10000.	452.	0.	13.	40.	33.	13.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
11000.	455.	0.	10.	31.	36.	18.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
12000.	456.	0.	10.	24.	34.	25.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.		
13000.	456.	0.	8.	21.	31.	24.	12.	4.	1.	0.	0.	0.	0.	0.	0.	0.		
14000.	455.	0.	8.	17.	29.	25.	13.	6.	2.	0.	0.	0.	0.	0.	0.	0.		
15000.	453.	0.	6.	16.	27.	24.	14.	7.	5.	1.	0.	0.	0.	0.	0.	0.		
16000.	451.	0.	6.	14.	25.	25.	14.	7.	6.	2.	0.	0.	0.	0.	0.	0.		
18000.	446.	0.	6.	14.	21.	25.	14.	10.	5.	4.	0.	0.	0.	0.	0.	0.		
20000.	429.	0.	5.	15.	17.	23.	14.	12.	7.	3.	0.	0.	0.	0.	0.	0.		
25000.	393.	0.	2.	9.	16.	19.	17.	13.	9.	5.	2.	4.	0.	0.	0.	0.		
30000.	363.	0.	1.	5.	13.	16.	14.	12.	12.	9.	6.	6.	2.	0.	0.	0.		
35000.	321.	1.	0.	3.	10.	12.	16.	12.	13.	12.	8.	8.	2.	0.	0.	0.		
40000.	289.	0.	0.	3.	7.	12.	11.	14.	13.	16.	7.	7.	2.	1.	1.	1.		
45000.	260.	0.	2.	2.	5.	12.	18.	18.	15.	12.	8.	3.	0.	0.	0.	0.		
50000.	219.	0.	1.	5.	9.	14.	20.	20.	17.	8.	3.	2.	0.	0.	0.	0.		
55000.	179.	0.	2.	6.	20.	20.	26.	11.	7.	5.	2.	1.	0.	0.	0.	0.		
60000.	164.	0.	7.	23.	32.	22.	8.	4.	2.	1.	1.	0.	0.	0.	0.	0.		
65000.	154.	0.	21.	44.	20.	6.	6.	1.	0.	1.	1.	0.	0.	0.	0.	0.		
70000.	146.	0.	34.	39.	19.	3.	3.	1.	0.	1.	1.	0.	0.	0.	0.	0.		
75000.	139.	1.	37.	37.	14.	6.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
80000.	122.	0.	25.	41.	19.	11.	2.	2.	1.	0.	0.	0.	0.	0.	0.	0.		
85000.	115.	0.	27.	34.	20.	10.	5.	3.	1.	0.	0.	0.	0.	0.	0.	0.		
90000.	102.	0.	22.	37.	18.	12.	5.	3.	3.	1.	0.	0.	0.	0.	0.	0.		
95000.	96.	0.	16.	34.	18.	15.	8.	4.	3.	0.	0.	0.	0.	0.	0.	0.		
100000.	74.	0.	16.	30.	12.	12.	15.	7.	4.	0.	1.	1.	0.	0.	0.	0.		

TABLE IV (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
FEBRUARY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)										100 - 125		125 - 150	
			10	11	12	13	14	15	16	17	18	19	20	21	22	23
4940.	394.	22.	56.	21.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	501.	21.	58.	21.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	499.	0.	60.	36.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	499.	0.	37.	48.	12.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	497.	0.	27.	49.	19.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	497.	0.	17.	52.	24.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	498.	0.	13.	43.	31.	8.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	496.	0.	10.	35.	37.	11.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	496.	0.	9.	29.	31.	20.	7.	3.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	496.	0.	9.	22.	33.	20.	9.	5.	1.	0.	0.	0.	0.	0.	0.	0.
14000.	495.	0.	8.	20.	31.	22.	9.	7.	3.	1.	0.	0.	0.	0.	0.	0.
15000.	493.	0.	6.	18.	29.	24.	10.	7.	4.	1.	0.	0.	0.	0.	0.	0.
16000.	494.	0.	7.	15.	26.	24.	13.	7.	5.	2.	0.	0.	0.	0.	0.	0.
18000.	491.	0.	5.	11.	22.	26.	14.	7.	7.	4.	1.	0.	0.	0.	0.	0.
20000.	478.	0.	3.	12.	17.	24.	17.	9.	7.	5.	2.	0.	0.	0.	0.	0.
25000.	436.	0.	3.	6.	12.	16.	13.	15.	10.	8.	3.	1.	0.	0.	0.	0.
30000.	396.	0.	3.	4.	8.	10.	12.	12.	14.	10.	6.	3.	0.	0.	0.	0.
35000.	341.	1.	2.	3.	5.	7.	13.	11.	11.	11.	11.	8.	1.	0.	0.	0.
40000.	309.	0.	1.	2.	3.	6.	8.	14.	15.	15.	15.	9.	5.	1.	1.	1.
45000.	274.	0.	0.	1.	1.	8.	9.	21.	16.	16.	16.	14.	3.	0.	0.	0.
50000.	233.	0.	0.	2.	6.	9.	19.	21.	19.	16.	16.	14.	3.	0.	0.	0.
55000.	191.	0.	1.	4.	10.	18.	26.	21.	12.	9.	9.	14.	3.	0.	0.	0.
60000.	175.	0.	6.	26.	27.	22.	7.	8.	3.	1.	1.	9.	0.	0.	0.	0.
65000.	157.	1.	20.	36.	29.	9.	4.	0.	2.	0.	0.	0.	0.	0.	0.	0.
70000.	131.	0.	29.	41.	22.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	122.	0.	31.	37.	22.	6.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	111.	0.	28.	34.	20.	12.	5.	2.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	107.	0.	24.	25.	20.	17.	6.	7.	2.	0.	0.	0.	0.	0.	0.	0.
90000.	100.	0.	18.	28.	18.	12.	11.	6.	4.	1.	1.	2.	0.	0.	0.	0.
95000.	95.	0.	14.	21.	18.	17.	13.	6.	5.	4.	4.	2.	0.	0.	0.	0.
100000.	73.	0.	8.	16.	21.	26.	5.	7.	5.	1.	1.	7.	0.	1.	1.	0.

TABLE IV (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STATION: SITE
 PERIOD OF RECORD 1961-1973
 MARCH

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)										WIND SPEED (KNOTS)				WIND SPEED (KNOTS)			
			>1 <10	>10 <20	>20 <30	>30 <40	>40 <50	>50 <60	>60 <70	>70 <80	>80 <90	>90 <100	>100 <125	>125 <150	>150	>150	>150	>150	>150	>150
4940.	415.	16.	53.	27.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	505.	14.	54.	28.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	506.	0.	52.	39.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	506.	0.	35.	47.	15.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	506.	0.	26.	47.	23.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	506.	0.	17.	47.	27.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	505.	0.	14.	39.	33.	12.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	502.	0.	11.	34.	33.	18.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	502.	0.	7.	26.	37.	19.	8.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	502.	0.	6.	22.	32.	26.	10.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	500.	0.	4.	18.	32.	23.	14.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	500.	0.	3.	14.	31.	21.	16.	10.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	500.	0.	2.	10.	26.	25.	17.	11.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	499.	0.	2.	8.	19.	24.	16.	15.	9.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	490.	0.	2.	7.	15.	22.	17.	12.	11.	9.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	441.	0.	1.	4.	9.	11.	17.	14.	11.	12.	9.	6.	6.	1.	0.	0.	0.	0.	0.	0.
30000.	397.	0.	1.	5.	6.	10.	9.	10.	10.	13.	10.	10.	13.	3.	1.	0.	0.	0.	0.	0.
35000.	329.	1.	1.	3.	5.	9.	9.	9.	12.	11.	14.	13.	13.	3.	1.	0.	0.	0.	0.	0.
40000.	269.	2.	0.	1.	7.	8.	12.	8.	16.	17.	10.	9.	9.	4.	0.	0.	0.	0.	0.	0.
45000.	242.	2.	1.	2.	4.	10.	13.	15.	19.	15.	11.	11.	11.	2.	0.	0.	0.	0.	0.	0.
50000.	208.	1.	1.	3.	7.	14.	16.	20.	24.	10.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	173.	1.	1.	8.	18.	17.	21.	20.	8.	4.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	152.	0.	9.	24.	36.	18.	7.	3.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	136.	0.	21.	43.	26.	7.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	129.	1.	43.	36.	12.	4.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	117.	0.	46.	38.	11.	1.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	107.	0.	32.	36.	22.	6.	1.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	102.	1.	26.	38.	25.	7.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	91.	0.	14.	37.	27.	12.	5.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	83.	0.	18.	12.	30.	20.	17.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	62.	2.	6.	16.	31.	18.	13.	6.	6.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CAL ⁽¹⁾	WIND SPEED (KNOTS)											
			>1 10	<10 20	>20 30	<30 40	>40 50	<50 60	>60 70	<70 80	>80 90	<90 100	>100 125	<125 150
4940.	444.	16.	50.	29.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	559.	14.	53.	29.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	559.	1.	54.	36.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	559.	0.	42.	41.	13.	4.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	558.	0.	35.	44.	15.	5.	1.	0.	0.	0.	0.	0.	0.	0.
9000.	559.	0.	29.	44.	20.	5.	2.	0.	0.	0.	0.	0.	0.	0.
10000.	559.	0.	22.	44.	24.	7.	3.	0.	0.	0.	0.	0.	0.	0.
11000.	559.	0.	17.	42.	25.	12.	3.	1.	0.	0.	0.	0.	0.	0.
12000.	559.	0.	14.	36.	28.	13.	7.	0.	0.	0.	0.	0.	0.	0.
13000.	559.	0.	12.	29.	30.	16.	7.	1.	0.	0.	0.	0.	0.	0.
14000.	560.	0.	11.	26.	29.	17.	8.	3.	0.	0.	0.	0.	0.	0.
15000.	560.	0.	10.	21.	31.	15.	10.	4.	1.	0.	0.	0.	0.	0.
16000.	559.	0.	9.	18.	30.	19.	8.	6.	1.	0.	0.	0.	0.	0.
18000.	552.	0.	9.	13.	26.	22.	10.	8.	3.	1.	1.	0.	0.	0.
20000.	526.	1.	5.	12.	19.	22.	16.	9.	5.	2.	2.	0.	0.	0.
25000.	482.	0.	1.	11.	11.	15.	16.	15.	8.	5.	3.	0.	0.	0.
30000.	453.	2.	0.	8.	9.	10.	13.	14.	9.	9.	6.	1.	0.	0.
35000.	353.	2.	0.	5.	7.	5.	14.	12.	12.	11.	7.	2.	0.	0.
40000.	290.	3.	0.	2.	6.	9.	9.	15.	14.	14.	6.	1.	0.	0.
45000.	255.	0.	0.	3.	10.	7.	14.	18.	16.	7.	4.	0.	0.	0.
50000.	230.	0.	0.	4.	10.	16.	24.	17.	8.	3.	0.	0.	0.	0.
55000.	192.	0.	1.	10.	24.	25.	20.	9.	2.	2.	0.	0.	0.	0.
60000.	173.	1.	11.	41.	26.	13.	6.	1.	0.	1.	0.	0.	0.	0.
65000.	162.	2.	43.	35.	14.	4.	2.	1.	0.	0.	0.	0.	0.	0.
70000.	147.	0.	61.	33.	4.	0.	1.	1.	0.	0.	0.	0.	0.	0.
75000.	140.	0.	53.	30.	9.	1.	0.	2.	0.	0.	0.	0.	0.	0.
80000.	125.	0.	57.	30.	10.	3.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	116.	2.	45.	36.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	110.	1.	36.	39.	18.	4.	1.	1.	0.	0.	0.	0.	0.	0.
95000.	98.	4.	26.	31.	29.	10.	1.	0.	0.	0.	0.	0.	0.	0.
100000.	73.	3.	15.	27.	29.	15.	8.	1.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
MAY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	10		20		30		40		50		60		70		80		90		100		125		150	
			<10	10-20	<20	20-30	<30	30-40	<40	40-50	<50	50-60	<60	60-70	<70	70-80	<80	80-90	<90	90-100	<100	100-125	<125	>125	<150	>150
4940.	443.	17.	56.	25.	25.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	488.	15.	55.	27.	27.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	488.	0.	60.	34.	34.	6.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	488.	0.	48.	39.	39.	11.	11.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	488.	0.	40.	43.	43.	13.	13.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	490.	0.	37.	47.	47.	13.	13.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	491.	0.	33.	47.	47.	15.	15.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	488.	0.	29.	45.	45.	19.	19.	5.	5.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	487.	0.	26.	43.	43.	20.	20.	7.	7.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	485.	0.	20.	40.	40.	25.	25.	9.	9.	3.	3.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	483.	0.	18.	35.	35.	27.	27.	12.	12.	5.	5.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	479.	0.	16.	32.	32.	28.	28.	13.	13.	6.	6.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	478.	0.	15.	29.	29.	28.	28.	15.	15.	8.	8.	4.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	474.	0.	11.	28.	28.	26.	26.	14.	14.	12.	12.	5.	5.	2.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	464.	0.	7.	27.	27.	25.	25.	16.	16.	13.	13.	6.	6.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	449.	0.	6.	19.	19.	20.	20.	18.	18.	14.	14.	10.	10.	6.	6.	4.	4.	2.	2.	1.	1.	2.	0.	0.	0.	0.
30000.	416.	2.	3.	15.	15.	17.	17.	16.	16.	12.	12.	12.	12.	10.	10.	5.	6.	1.	1.	1.	1.	1.	0.	0.	0.	0.
35000.	333.	2.	3.	8.	8.	15.	15.	17.	17.	11.	11.	13.	13.	9.	8.	8.	8.	2.	2.	3.	3.	3.	1.	0.	0.	0.
40000.	285.	2.	1.	8.	8.	13.	13.	14.	14.	13.	13.	12.	12.	10.	7.	10.	10.	3.	3.	1.	1.	1.	0.	0.	0.	0.
45000.	269.	1.	2.	7.	7.	11.	11.	19.	19.	18.	18.	15.	15.	11.	9.	4.	4.	1.	1.	1.	1.	1.	1.	0.	0.	0.
50000.	232.	0.	1.	8.	8.	21.	21.	25.	25.	24.	24.	12.	12.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	188.	0.	5.	29.	29.	29.	29.	23.	23.	7.	7.	5.	5.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	174.	1.	44.	40.	40.	10.	10.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	154.	0.	69.	28.	28.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	142.	1.	68.	30.	30.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	133.	0.	53.	44.	44.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	127.	0.	43.	46.	46.	12.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	121.	1.	45.	40.	40.	12.	12.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	115.	0.	41.	47.	47.	10.	10.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	99.	2.	27.	55.	55.	12.	12.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	76.	3.	32.	47.	47.	14.	14.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STATION SITE
 PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	10		20		30		40		50		60		70		80		90		100		125		150	
			10	20	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
4940.	343.	15.	60.	25.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	369.	15.	59.	26.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	370.	0.	66.	29.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	369.	0.	50.	41.	8.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	370.	0.	45.	43.	11.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	370.	0.	44.	41.	14.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	373.	0.	41.	43.	14.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	373.	0.	35.	45.	17.	0.	3.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	375.	0.	31.	43.	19.	0.	5.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	373.	0.	30.	35.	23.	0.	9.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	373.	0.	26.	36.	22.	0.	13.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	371.	1.	22.	36.	21.	0.	14.	0.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	370.	1.	18.	37.	22.	0.	15.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	367.	0.	15.	32.	25.	0.	15.	0.	9.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	360.	0.	14.	29.	26.	0.	15.	0.	11.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	333.	0.	9.	26.	26.	0.	19.	0.	11.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	309.	1.	7.	14.	24.	0.	20.	0.	16.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	257.	2.	4.	11.	19.	0.	18.	0.	15.	0.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	220.	1.	4.	3.	22.	0.	16.	0.	12.	0.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	203.	0.	1.	11.	15.	0.	19.	0.	18.	0.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	191.	1.	5.	18.	27.	0.	23.	0.	17.	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	171.	0.	21.	47.	23.	0.	8.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	158.	1.	44.	47.	6.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	139.	0.	33.	58.	7.	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	133.	0.	19.	63.	17.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	128.	1.	5.	59.	34.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	124.	0.	6.	42.	45.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	118.	0.	9.	34.	43.	0.	12.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	112.	0.	5.	33.	42.	0.	19.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	100.	1.	4.	26.	41.	0.	27.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	85.	1.	7.	19.	39.	0.	33.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)																							
			≥ 1 ≤ 10	≥ 10 ≤ 20	≥ 20 ≤ 30	≥ 30 ≤ 40	≥ 40 ≤ 50	≥ 50 ≤ 60	≥ 60 ≤ 70	≥ 70 ≤ 80	≥ 80 ≤ 90	≥ 90 ≤ 100	≥ 100 ≤ 125	≥ 125 ≤ 150	≥ 150											
4940.	363.	25.	64.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	386.	22.	66.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	386.	2.	83.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	386.	1.	74.	23.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	386.	0.	70.	28.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	388.	0.	66.	32.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	389.	1.	64.	34.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	391.	0.	60.	37.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	392.	0.	59.	37.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	392.	0.	54.	40.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	392.	0.	47.	47.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	391.	0.	43.	50.	5.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	390.	0.	40.	52.	7.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	388.	0.	41.	47.	10.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	383.	0.	46.	45.	9.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	353.	0.	38.	49.	11.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	335.	0.	27.	44.	22.	6.	6.	6.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	294.	1.	15.	39.	28.	10.	10.	10.	10.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	244.	0.	11.	37.	25.	18.	18.	18.	18.	6.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
45000.	218.	0.	19.	39.	22.	16.	16.	16.	16.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	205.	1.	35.	43.	15.	5.	5.	5.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	174.	0.	44.	47.	9.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	165.	0.	18.	65.	16.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	153.	0.	5.	42.	53.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	147.	0.	1.	34.	48.	17.	17.	17.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	141.	0.	0.	11.	69.	19.	19.	19.	19.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	138.	0.	0.	5.	57.	36.	36.	36.	36.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	129.	0.	0.	3.	30.	57.	57.	57.	57.	9.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
90000.	122.	0.	0.	0.	22.	48.	48.	48.	48.	27.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
95000.	116.	0.	0.	0.	6.	52.	52.	52.	52.	37.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
100000.	105.	1.	0.	0.	8.	45.	45.	45.	45.	38.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.

TABLE IV (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

AUGUST

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	≥ 1		≥ 10		≥ 20		≥ 30		≥ 40		≥ 50		≥ 60		≥ 70		≥ 80		≥ 90		≥ 100		≥ 125		≥ 150	
			>	<10	>	<20	>	<30	>	<40	>	<50	>	<60	>	<70	>	<80	>	<90	>	<100	>	<125	>	<150	>	<150
4940.	384.	22.	66.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	407.	22.	66.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	407.	1.	85.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	408.	1.	72.	26.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
8000.	408.	1.	66.	30.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.
9000.	410.	0.	63.	33.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.
10000.	410.	0.	60.	36.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
11000.	411.	0.	57.	38.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
12000.	411.	0.	50.	43.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.
13000.	412.	0.	45.	47.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.
14000.	411.	0.	45.	46.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.
15000.	411.	0.	41.	49.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.
16000.	410.	0.	37.	51.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.	11.
18000.	406.	0.	35.	50.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.	13.
20000.	404.	0.	35.	51.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.
25000.	385.	0.	31.	46.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.	18.
30000.	369.	0.	20.	38.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.
35000.	330.	0.	14.	34.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.	27.
40000.	296.	0.	14.	31.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.	21.
45000.	260.	0.	15.	34.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.	26.
50000.	238.	0.	35.	39.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.	16.
55000.	212.	0.	49.	46.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.
60000.	198.	1.	30.	56.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.
65000.	189.	1.	10.	58.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.
70000.	176.	1.	4.	36.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.	58.
75000.	166.	0.	0.	17.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.	64.
80000.	158.	0.	0.	10.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.	52.
85000.	154.	0.	0.	3.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.	44.
90000.	137.	0.	0.	1.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.	30.
95000.	123.	1.	0.	1.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.	19.
100000.	106.	0.	0.	0.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.	17.

TABLE IV (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	≥ 1 < 10		≥ 10 < 20		≥ 20 < 30		≥ 30 < 40		WIND SPEED (KNOTS)						≥ 80 < 90		≥ 90 < 100		≥ 100 < 125		≥ 125 < 150		≥ 150 < 175	
											≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100										
4940.	324.	24.	62.	13.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	366.	21.	64.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	365.	1.	76.	21.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	366.	1.	61.	33.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	366.	0.	51.	40.	8.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	367.	0.	45.	43.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	366.	0.	43.	44.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	365.	0.	38.	44.	14.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	365.	0.	34.	43.	17.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	365.	0.	32.	44.	18.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	365.	0.	29.	45.	17.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	364.	0.	29.	44.	16.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	364.	0.	27.	45.	15.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	362.	0.	23.	44.	17.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	360.	0.	23.	37.	21.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	346.	0.	12.	31.	28.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	326.	1.	6.	17.	25.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	278.	0.	4.	7.	19.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	254.	0.	1.	6.	11.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	233.	0.	2.	5.	13.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	220.	0.	3.	13.	33.	22.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	197.	1.	21.	42.	27.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	185.	1.	50.	42.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	175.	0.	53.	44.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	164.	0.	42.	45.	12.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	158.	0.	36.	42.	19.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	152.	0.	30.	41.	26.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	144.	1.	24.	47.	23.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	132.	1.	25.	39.	31.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	116.	1.	20.	45.	32.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	103.	1.	19.	35.	35.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STATION SITE
 PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)										WIND SPEED (KNOTS)													
			< 10	> 10	< 20	> 20	< 30	> 30	< 40	> 40	< 50	> 50	< 60	> 60	< 70	> 70	< 80	> 80	< 90	> 90	< 100	> 100	< 125	> 125	< 150	> 150
4940.	367.	26.	58.	15.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	415.	23.	61.	14.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	415.	0.	75.	22.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	416.	0.	59.	34.	6.	6.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	416.	0.	47.	42.	9.	9.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	416.	0.	41.	44.	12.	12.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	417.	0.	33.	47.	16.	16.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	417.	0.	27.	48.	16.	16.	6.	6.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	417.	0.	23.	46.	19.	19.	9.	9.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	418.	0.	21.	41.	22.	22.	9.	9.	5.	5.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	418.	0.	22.	37.	23.	23.	11.	11.	5.	5.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	416.	0.	20.	36.	22.	22.	14.	14.	4.	4.	2.	2.	2.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	416.	0.	17.	35.	26.	26.	13.	13.	3.	3.	3.	3.	3.	3.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	415.	0.	18.	26.	27.	27.	17.	17.	6.	6.	6.	6.	4.	4.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	411.	0.	17.	22.	27.	27.	19.	19.	9.	9.	9.	9.	7.	7.	3.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	389.	1.	12.	16.	21.	21.	23.	23.	13.	18.	13.	13.	17.	15.	15.	11.	7.	5.	1.	1.	1.	1.	1.	1.	0.	0.
30000.	364.	2.	9.	11.	16.	16.	18.	18.	18.	17.	13.	11.	17.	15.	15.	11.	7.	8.	2.	1.	2.	3.	3.	3.	0.	0.
35000.	316.	3.	4.	12.	10.	10.	13.	13.	17.	13.	13.	11.	17.	15.	15.	11.	7.	9.	3.	3.	2.	3.	3.	3.	0.	0.
40000.	289.	3.	3.	9.	12.	12.	11.	11.	13.	13.	21.	13.	21.	11.	11.	13.	10.	5.	2.	2.	1.	1.	1.	1.	0.	0.
45000.	256.	0.	1.	10.	15.	15.	13.	13.	21.	18.	18.	13.	21.	9.	9.	7.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	248.	2.	4.	15.	21.	21.	20.	20.	16.	6.	6.	20.	16.	2.	2.	7.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	221.	1.	9.	34.	27.	27.	16.	16.	1.	0.	0.	16.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	213.	0.	43.	41.	13.	13.	1.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	202.	0.	57.	36.	5.	5.	1.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	196.	1.	64.	32.	3.	3.	1.	1.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	186.	1.	54.	39.	5.	5.	1.	1.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	175.	1.	50.	39.	10.	10.	1.	1.	1.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	165.	1.	44.	38.	13.	13.	4.	4.	1.	1.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	152.	1.	37.	25.	20.	20.	13.	13.	1.	1.	2.	13.	1.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	134.	3.	28.	26.	19.	19.	18.	18.	6.	6.	0.	18.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	114.	4.	23.	28.	12.	12.	19.	19.	11.	11.	4.	19.	11.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
NOVEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM > 1 < 10	WIND SPEED (KNOTS)																						
			> 1 < 10	> 20 < 30	> 30 < 40	> 40 < 50	> 50 < 60	> 60 < 70	> 70 < 80	> 80 < 90	> 90 < 100	> 100 < 125	> 125 < 150	> 150											
4940.	348.	24.	56.	18.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	406.	21.	60.	18.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	405.	0.	60.	36.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	405.	0.	41.	44.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	406.	0.	31.	45.	17.	4.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	407.	0.	21.	47.	23.	6.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	407.	0.	15.	46.	28.	9.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	408.	0.	11.	38.	33.	13.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	405.	0.	10.	31.	31.	20.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	404.	0.	10.	26.	31.	13.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	404.	0.	8.	25.	28.	20.	14.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	403.	0.	8.	19.	26.	23.	15.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	403.	0.	7.	18.	23.	25.	12.	11.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	402.	0.	4.	10.	21.	22.	16.	11.	6.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	391.	0.	3.	16.	18.	20.	16.	13.	6.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	345.	0.	2.	9.	16.	14.	16.	12.	10.	10.	12.	10.	9.	7.	12.	10.	6.	3.	1.	3.	3.	0.	0.	0.	0.
30000.	322.	1.	1.	5.	10.	15.	15.	13.	9.	15.	13.	12.	10.	7.	12.	10.	8.	6.	7.	6.	6.	1.	0.	0.	0.
35000.	293.	8.	1.	3.	6.	9.	13.	16.	7.	13.	16.	13.	9.	7.	9.	12.	11.	8.	5.	8.	9.	2.	0.	0.	0.
40000.	233.	2.	1.	1.	4.	10.	14.	15.	12.	14.	15.	15.	12.	15.	15.	10.	5.	5.	9.	5.	5.	0.	0.	0.	0.
45000.	211.	0.	1.	3.	7.	8.	18.	16.	17.	18.	16.	16.	17.	14.	17.	17.	6.	4.	4.	5.	5.	0.	0.	0.	0.
50000.	193.	1.	2.	5.	9.	15.	19.	22.	19.	15.	22.	22.	19.	6.	19.	19.	3.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	164.	1.	3.	14.	15.	23.	19.	15.	8.	23.	15.	11.	8.	2.	19.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	152.	0.	11.	29.	30.	18.	7.	3.	3.	18.	3.	3.	3.	0.	7.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	148.	1.	25.	39.	18.	14.	3.	1.	0.	14.	1.	1.	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	143.	0.	27.	43.	17.	10.	3.	0.	0.	10.	0.	0.	0.	0.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	134.	0.	33.	33.	23.	7.	3.	1.	0.	7.	1.	0.	0.	0.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	130.	2.	25.	29.	25.	9.	6.	3.	1.	9.	3.	1.	0.	0.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	122.	0.	18.	32.	25.	8.	7.	7.	2.	8.	7.	3.	1.	0.	7.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	112.	2.	11.	32.	21.	11.	6.	5.	7.	11.	6.	5.	2.	1.	11.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	93.	3.	10.	20.	18.	16.	6.	9.	8.	16.	6.	9.	7.	4.	16.	9.	1.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	73.	5.	5.	14.	15.	15.	16.	7.	12.	15.	16.	7.	12.	3.	15.	7.	4.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IV (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STATION SITE
PERIOD OF RECORD 1961-1973

DECEMBER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN (KNOTS)										WIND SPPEEN 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TABLE V
UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
STALLION SITE
PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S					
4940.	1075.	24.	0.	1.5	-7	336.	2.	5.	36.	7.
5000.	1269.	24.	0.	1.4	-7	333.	2.	5.	31.	7.
6000.	1269.	37.	0.	2.1	-2.2	314.	3.	9.	35.	10.
7000.	1269.	63.	0.	1.3	-5.2	285.	5.	12.	43.	13.
8000.	1265.	51.	1.	1.6	-7.8	282.	8.	15.	53.	15.
9000.	1274.	52.	0.	2.4	-10.0	284.	10.	17.	60.	16.
10000.	1277.	60.	0.	3.3	-12.3	285.	13.	20.	65.	18.
11000.	1278.	66.	0.	4.1	-14.7	286.	15.	22.	69.	19.
12000.	1279.	66.	0.	4.7	-17.0	285.	18.	25.	72.	21.
13000.	1279.	73.	1.	4.8	-19.1	284.	20.	27.	73.	23.
14000.	1277.	78.	2.	4.8	-20.9	283.	21.	29.	74.	24.
15000.	1272.	84.	2.	4.8	-22.4	282.	23.	31.	74.	26.
16000.	1271.	100.	0.	4.8	-23.7	281.	24.	33.	74.	28.
18000.	1261.	107.	0.	4.6	-26.1	280.	27.	36.	74.	30.
20000.	1226.	119.	2.	4.6	-28.8	279.	29.	39.	74.	33.
25000.	1132.	164.	1.	4.4	-36.0	277.	36.	49.	74.	42.
30000.	1032.	202.	0.	3.1	-43.2	274.	43.	57.	76.	48.
35000.	904.	179.	0.	2.0	-50.1	272.	50.	64.	79.	51.
40000.	813.	186.	3.	.2	-56.8	270.	57.	66.	86.	46.
45000.	722.	142.	4.	.4	-53.2	270.	53.	60.	89.	36.
50000.	628.	124.	0.	-.2	-46.5	270.	47.	52.	90.	30.
55000.	523.	107.	5.	1.0	-39.1	271.	39.	43.	91.	25.
60000.	489.	97.	0.	1.4	-24.3	273.	24.	28.	86.	21.
65000.	456.	112.	0.	2.8	-14.5	281.	15.	19.	77.	18.
70000.	414.	74.	1.	2.2	-8.7	284.	9.	16.	56.	17.
75000.	396.	71.	0.	2.5	-6.4	291.	7.	16.	43.	18.
80000.	365.	89.	1.	2.5	-6.1	292.	7.	18.	36.	22.
85000.	348.	100.	1.	2.5	-8.2	287.	9.	22.	39.	26.
90000.	322.	95.	1.	1.0	-12.9	274.	13.	26.	49.	30.
95000.	304.	120.	0.	-.3	-18.0	269.	18.	33.	55.	36.
100000.	239.	139.	0.	-1.3	-23.8	267.	24.	40.	60.	42.

TABLE V (CONT)
 UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

SPRING

GEO METRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S	-W					
4940.	1302.	33.	0.	-1.1	-1.1	-1.1	225.	2.	7.	22.	9.
5000.	1552.	32.	0.	-1.1	-1.1	-1.1	226.	2.	7.	21.	9.
6000.	1553.	32.	0.	-1.7	-2.6	-2.6	236.	3.	10.	31.	11.
7000.	1553.	41.	1.	-3.1	-4.7	-4.7	237.	6.	12.	45.	13.
8000.	1552.	46.	1.	-3.5	-6.4	-6.4	241.	7.	14.	53.	14.
9000.	1555.	54.	0.	-3.7	-8.2	-8.2	246.	9.	15.	60.	15.
10000.	1555.	58.	0.	-3.6	-10.3	-10.3	251.	11.	17.	66.	16.
11000.	1549.	63.	0.	-3.6	-12.6	-12.6	254.	13.	19.	70.	17.
12000.	1548.	68.	0.	-3.7	-15.1	-15.1	256.	16.	21.	74.	18.
13000.	1546.	69.	0.	-4.0	-17.5	-17.5	257.	18.	23.	77.	20.
14000.	1543.	71.	0.	-4.2	-19.7	-19.7	258.	20.	26.	78.	21.
15000.	1539.	81.	0.	-4.4	-21.8	-21.8	259.	22.	28.	80.	23.
16000.	1537.	92.	0.	-4.4	-23.8	-23.8	259.	24.	30.	81.	24.
18000.	1525.	91.	0.	-4.9	-27.5	-27.5	260.	28.	34.	82.	27.
20000.	1480.	104.	0.	-5.6	-31.1	-31.1	260.	32.	38.	84.	29.
25000.	1372.	139.	0.	-8.4	-39.9	-39.9	258.	41.	48.	85.	36.
30000.	1266.	156.	0.	-9.7	-47.1	-47.1	258.	48.	56.	87.	41.
35000.	1015.	175.	0.	-9.5	-52.1	-52.1	260.	53.	60.	88.	42.
40000.	844.	155.	0.	-9.6	-53.7	-53.7	260.	55.	60.	90.	39.
45000.	766.	146.	0.	-9.5	-49.9	-49.9	259.	51.	54.	94.	30.
50000.	670.	106.	0.	-7.7	-42.5	-42.5	260.	43.	46.	94.	24.
55000.	553.	93.	0.	-5.8	-31.7	-31.7	260.	32.	35.	92.	22.
60000.	499.	82.	0.	-3.8	-15.7	-15.7	256.	16.	20.	82.	17.
65000.	452.	57.	0.	-1.6	-6.7	-6.7	257.	7.	13.	55.	14.
70000.	418.	60.	0.	-0.7	-1.1	-1.1	238.	1.	10.	13.	13.
75000.	390.	55.	1.	-0.8	.3	.3	156.	1.	11.	8.	14.
80000.	359.	57.	1.	-1.0	.9	.9	136.	1.	13.	11.	15.
85000.	339.	61.	0.	-1.0	-0.2	-0.2	189.	1.	13.	8.	16.
90000.	316.	75.	0.	-1.4	-4.4	-4.4	247.	5.	15.	31.	18.
95000.	280.	86.	0.	-2.1	-8.0	-8.0	255.	8.	18.	45.	20.
100000.	211.	88.	0.	-1.9	-12.3	-12.3	261.	12.	21.	58.	23.

TABLE V (CONT)
 UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

SUMMER

GEO. ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)		RESULTANT WIND DIRECTION (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+N	-S					
4940.	1090.	67.	0.	-0.4	.2	153.	0.	5.	9.	7.
5000.	1162.	66.	0.	-0.5	.2	157.	1.	5.	10.	7.
6000.	1163.	47.	0.	-1.1	-0.4	199.	1.	7.	17.	8.
7000.	1163.	36.	0.	-2.7	-1.6	211.	3.	6.	38.	9.
8000.	1164.	34.	0.	-3.0	-2.5	220.	4.	9.	43.	10.
9000.	1168.	36.	0.	-2.5	-2.7	227.	4.	9.	39.	10.
10000.	1172.	40.	0.	-2.0	-2.8	234.	3.	10.	35.	11.
11000.	1175.	44.	1.	-1.7	-2.7	239.	3.	11.	31.	12.
12000.	1178.	50.	0.	-1.6	-2.7	240.	3.	11.	28.	13.
13000.	1177.	51.	0.	-1.6	-2.6	237.	3.	12.	25.	14.
14000.	1176.	48.	1.	-1.8	-2.5	235.	3.	13.	23.	15.
15000.	1173.	50.	0.	-2.0	-2.5	231.	3.	14.	24.	16.
16000.	1170.	50.	0.	-2.2	-2.8	231.	4.	14.	24.	17.
18000.	1161.	61.	0.	-2.3	-3.6	237.	4.	15.	28.	18.
20000.	1147.	67.	0.	-2.5	-4.8	243.	5.	15.	35.	18.
25000.	1071.	64.	0.	-2.7	-7.4	250.	8.	18.	44.	20.
30000.	1013.	79.	0.	-3.0	-10.2	254.	11.	22.	48.	24.
35000.	881.	96.	0.	-2.0	-13.0	261.	13.	26.	50.	28.
40000.	760.	102.	0.	-0.9	-15.5	267.	16.	29.	53.	31.
45000.	681.	85.	0.	-0.6	-14.7	268.	15.	27.	54.	28.
50000.	634.	79.	0.	-1.3	-8.1	261.	8.	19.	43.	22.
55000.	557.	46.	1.	-2.2	.2	175.	2.	12.	18.	14.
60000.	521.	45.	0.	-1.9	8.9	102.	9.	12.	73.	10.
65000.	481.	47.	0.	-1.2	15.2	95.	15.	16.	94.	9.
70000.	456.	38.	0.	-1.4	18.7	94.	19.	19.	97.	8.
75000.	435.	42.	0.	-0.6	22.2	92.	22.	23.	96.	8.
80000.	420.	47.	6.	-1.3	25.1	93.	25.	26.	98.	8.
85000.	401.	51.	4.	-0.5	27.4	91.	27.	28.	99.	9.
90000.	371.	56.	4.	-0.9	29.7	92.	30.	30.	98.	11.
95000.	339.	57.	0.	-1.0	32.0	92.	32.	33.	98.	11.
100000.	296.	61.	0.	-2.2	33.7	94.	34.	34.	98.	12.

TABLE V (CONT)
UPPER AIR WIND DATA AT SELECTED LEVELS BY SEASONS
STATION: SITE
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	MAXIMUM SPEED (KNOTS)	MINIMUM SPEED (KNOTS)	RESULTANT WIND COMPONENTS (KNOTS)			RESULTANT DIRECTION, (DEGREES)	WIND SPEED (KNOTS)	SCALAR MEAN SPEED (KNOTS)	CONSTANCY (PERCENT)	STANDARD VECTOR DEVIATION (KNOTS)
				+U	-S	+E	-W				
4940.	1039.	56.	0.	.5		.1	13.	1.	5.	10.	7.
5000.	1187.	55.	0.	.5		-.0	357.	1.	5.	10.	7.
6000.	1185.	41.	0.	.3		-1.0	284.	1.	8.	13.	9.
7000.	1187.	68.	0.	-1.2		-3.2	249.	3.	10.	33.	12.
8000.	1188.	67.	1.	-1.4		-5.1	254.	5.	12.	43.	14.
9000.	1190.	64.	0.	-1.1		-6.6	261.	7.	14.	49.	14.
10000.	1190.	71.	0.	-.7		-8.1	265.	8.	15.	54.	15.
11000.	1190.	74.	0.	-.4		-9.6	268.	10.	17.	58.	16.
12000.	1187.	80.	0.	-.1		-11.0	269.	11.	18.	61.	18.
13000.	1187.	82.	0.	-.1		-12.3	270.	12.	20.	63.	19.
14000.	1187.	84.	0.	.1		-13.2	270.	13.	21.	64.	21.
15000.	1183.	85.	0.	.2		-14.2	271.	14.	22.	65.	22.
16000.	1183.	86.	0.	.2		-15.1	271.	15.	23.	65.	23.
18000.	1179.	109.	0.	.5		-17.1	272.	17.	26.	66.	25.
20000.	1162.	121.	0.	.3		-19.0	271.	19.	28.	67.	28.
25000.	1080.	122.	0.	-.4		-24.1	269.	24.	34.	70.	33.
30000.	1012.	144.	0.	-1.4		-30.3	267.	30.	42.	72.	39.
35000.	887.	137.	0.	-2.2		-37.1	267.	37.	48.	77.	41.
40000.	776.	139.	0.	-2.6		-44.0	267.	44.	53.	83.	39.
45000.	700.	134.	2.	-2.5		-43.1	267.	43.	49.	87.	33.
50000.	661.	90.	0.	-2.0		-33.2	267.	33.	38.	88.	25.
55000.	582.	86.	0.	-.9		-21.4	268.	21.	25.	84.	21.
60000.	550.	86.	0.	-.3		-8.9	268.	9.	15.	59.	17.
65000.	525.	86.	0.	-.4		-4.1	264.	4.	12.	34.	15.
70000.	503.	48.	0.	.5		-1.0	297.	1.	12.	10.	14.
75000.	478.	59.	0.	.3		.6	65.	1.	13.	5.	16.
80000.	457.	62.	0.	.4		-.7	301.	1.	15.	5.	18.
85000.	431.	78.	0.	.2		-2.4	276.	2.	17.	15.	20.
90000.	396.	86.	0.	-.5		-5.7	265.	6.	20.	29.	24.
95000.	343.	117.	0.	-.7		-8.5	265.	9.	22.	39.	27.
100000.	290.	121.	0.	-1.7		-9.6	260.	10.	25.	39.	30.

TABLE VI

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM	
		<30	30-60	60-90	90-120	120-150	150-180	180-210	210-240	240-270	270-300	300-330	330-360	<30	360
4940.	1075.	14.	6.	2.	1.	1.	3.	9.	6.	3.	3.	7.	14.	31.	
5000.	1269.	14.	5.	3.	1.	1.	3.	10.	6.	2.	7.	7.	16.	27.	
6000.	1269.	10.	5.	4.	6.	2.	2.	8.	10.	6.	7.	15.	25.	0.	
7000.	1269.	6.	4.	2.	1.	1.	5.	6.	15.	10.	10.	17.	19.	0.	
8000.	1265.	5.	4.	2.	1.	1.	2.	8.	17.	13.	11.	21.	14.	0.	
9000.	1274.	4.	4.	2.	1.	1.	2.	5.	15.	18.	15.	21.	12.	0.	
10000.	1277.	4.	3.	2.	1.	1.	3.	3.	11.	20.	19.	21.	12.	0.	
11000.	1278.	5.	3.	2.	1.	1.	2.	3.	11.	19.	22.	20.	12.	0.	
12000.	1279.	4.	3.	2.	1.	1.	1.	3.	10.	19.	24.	20.	12.	0.	
13000.	1279.	4.	2.	2.	1.	1.	1.	2.	10.	20.	25.	19.	12.	0.	
14000.	1277.	4.	2.	1.	1.	1.	1.	2.	10.	20.	26.	18.	12.	0.	
15000.	1272.	4.	3.	1.	1.	1.	1.	3.	9.	22.	26.	18.	11.	0.	
16000.	1271.	4.	3.	1.	1.	1.	0.	3.	10.	23.	26.	18.	11.	0.	
18000.	1261.	5.	3.	1.	1.	0.	0.	2.	11.	23.	26.	17.	10.	0.	
20000.	1226.	4.	3.	1.	1.	0.	0.	2.	11.	25.	25.	17.	11.	0.	
25000.	1132.	4.	2.	1.	1.	0.	0.	2.	11.	24.	24.	18.	11.	0.	
30000.	1032.	4.	2.	1.	1.	0.	1.	2.	10.	30.	24.	17.	8.	0.	
35000.	904.	4.	2.	2.	1.	0.	0.	1.	12.	30.	25.	16.	7.	0.	
40000.	813.	1.	1.	1.	0.	0.	0.	0.	10.	34.	34.	14.	5.	0.	
45000.	722.	1.	1.	0.	0.	0.	0.	0.	8.	38.	36.	13.	4.	0.	
50000.	628.	0.	1.	0.	0.	0.	0.	0.	7.	38.	37.	13.	3.	0.	
55000.	523.	1.	0.	0.	0.	0.	0.	1.	5.	41.	37.	12.	3.	0.	
60000.	489.	2.	1.	1.	0.	0.	1.	2.	8.	32.	32.	16.	6.	0.	
65000.	456.	4.	4.	2.	1.	0.	1.	2.	7.	24.	30.	15.	9.	1.	
70000.	414.	7.	6.	8.	4.	1.	2.	2.	8.	16.	25.	11.	9.	0.	
75000.	396.	8.	9.	12.	5.	2.	2.	3.	4.	21.	21.	9.	8.	0.	
80000.	365.	6.	11.	16.	5.	2.	1.	1.	4.	22.	22.	9.	4.	0.	
85000.	348.	4.	10.	16.	6.	3.	1.	2.	4.	25.	25.	5.	4.	0.	
90000.	322.	3.	9.	15.	6.	2.	1.	2.	6.	23.	23.	7.	3.	0.	
95000.	304.	4.	4.	15.	7.	1.	2.	0.	2.	24.	24.	4.	5.	0.	
100000.	239.	3.	5.	14.	5.	2.	0.	2.	4.	21.	21.	2.	4.	1.	

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)

TABLE VI (CONT)

STATION SITE

PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM
		360 30	330 30	300 60	270 90	240 120	210 150	180 180	150 210	120 240	90 270	60 300	30 330	
4940.	1302.	11.	7.	4.	2.	2.	7.	16.	11.	7.	4.	4.	8.	17.
5000.	1552.	10.	6.	4.	2.	2.	7.	17.	12.	7.	3.	4.	11.	14.
6000.	1553.	7.	4.	5.	4.	3.	5.	19.	15.	7.	6.	10.	14.	0.
7000.	1553.	4.	3.	3.	2.	2.	6.	20.	19.	10.	8.	10.	12.	0.
8000.	1552.	3.	3.	2.	2.	2.	6.	18.	22.	13.	8.	12.	10.	0.
9000.	1555.	2.	2.	2.	1.	1.	5.	15.	24.	16.	11.	12.	8.	0.
10000.	1555.	2.	2.	1.	1.	1.	4.	12.	25.	20.	13.	13.	7.	0.
11000.	1549.	3.	2.	1.	1.	1.	3.	10.	23.	22.	17.	13.	5.	0.
12000.	1543.	3.	1.	1.	1.	1.	3.	8.	22.	25.	19.	13.	4.	0.
13000.	1546.	2.	1.	1.	1.	1.	2.	7.	21.	28.	20.	11.	4.	0.
14000.	1543.	2.	1.	1.	1.	1.	2.	7.	20.	31.	20.	10.	4.	0.
15000.	1539.	2.	1.	0.	1.	1.	1.	6.	19.	33.	20.	10.	4.	0.
16000.	1537.	2.	1.	1.	1.	0.	1.	6.	17.	35.	22.	9.	4.	0.
18000.	1525.	2.	1.	1.	0.	0.	1.	4.	17.	37.	22.	9.	5.	0.
20000.	1480.	2.	1.	1.	0.	0.	1.	3.	16.	40.	21.	10.	4.	0.
25000.	1372.	1.	1.	1.	0.	0.	1.	3.	17.	43.	21.	9.	5.	0.
30000.	1266.	2.	1.	1.	0.	0.	1.	2.	16.	43.	21.	8.	4.	1.
35000.	1015.	1.	0.	1.	0.	0.	1.	2.	15.	46.	21.	8.	3.	2.
40000.	844.	1.	0.	1.	0.	0.	0.	2.	13.	50.	22.	6.	3.	2.
45000.	766.	0.	0.	0.	0.	0.	0.	1.	12.	54.	25.	1.	1.	1.
50000.	670.	0.	0.	0.	0.	0.	0.	1.	13.	54.	26.	1.	1.	0.
55000.	553.	0.	0.	0.	0.	0.	0.	2.	15.	47.	29.	5.	1.	0.
60000.	499.	1.	1.	1.	1.	1.	1.	7.	16.	33.	24.	6.	3.	0.
65000.	452.	3.	4.	6.	6.	12.	8.	5.	15.	23.	14.	10.	3.	1.
70000.	418.	5.	9.	13.	12.	16.	6.	4.	8.	13.	11.	8.	3.	1.
75000.	390.	5.	8.	16.	16.	16.	7.	5.	5.	15.	9.	5.	4.	0.
80000.	359.	4.	6.	19.	16.	16.	4.	5.	8.	16.	7.	5.	3.	0.
85000.	339.	4.	6.	16.	13.	10.	7.	5.	9.	18.	10.	4.	3.	1.
90000.	316.	2.	4.	13.	10.	10.	4.	4.	11.	25.	16.	4.	3.	0.
95000.	280.	2.	4.	11.	10.	10.	3.	4.	9.	34.	14.	4.	1.	2.
100000.	211.	2.	2.	7.	11.	11.	4.	0.	9.	29.	23.	5.	2.	2.

TABLE VI (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND PIPECTIONS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973
SUMMER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	WIND DIRECTIONS (DEGREES)												CALM.
		360 - 30	330 - 60	300 - 90	270 - 120	240 - 150	210 - 180	180 - 210	150 - 240	120 - 270	90 - 300	60 - 330	30 - 360	
4940.	1090.	12.	10.	4.	4.	7.	15.	9.	4.	2.	2.	6.	21.	
5000.	1162.	10.	9.	4.	4.	8.	15.	9.	4.	2.	3.	9.	20.	
6000.	1163.	8.	7.	8.	5.	7.	18.	9.	5.	7.	6.	10.	1.	
7000.	1163.	5.	4.	5.	5.	11.	21.	16.	7.	5.	6.	8.	1.	
8000.	1164.	5.	4.	4.	5.	11.	20.	18.	6.	7.	6.	6.	0.	
9000.	1168.	6.	4.	4.	5.	9.	17.	19.	9.	7.	9.	7.	0.	
10000.	1172.	7.	4.	6.	5.	7.	14.	17.	10.	8.	10.	6.	0.	
11000.	1175.	6.	5.	7.	5.	8.	11.	14.	13.	8.	10.	8.	0.	
12000.	1178.	6.	6.	8.	6.	6.	10.	15.	11.	9.	9.	8.	0.	
13000.	1177.	7.	6.	9.	7.	5.	10.	14.	11.	8.	9.	8.	0.	
14000.	1176.	8.	6.	10.	8.	5.	9.	15.	11.	7.	8.	7.	0.	
15000.	1173.	8.	7.	10.	8.	5.	8.	15.	12.	7.	7.	7.	0.	
16000.	1170.	7.	7.	11.	7.	6.	9.	15.	11.	7.	6.	7.	0.	
18000.	1161.	6.	8.	10.	7.	6.	9.	16.	11.	8.	7.	7.	0.	
20000.	1147.	6.	7.	10.	5.	6.	9.	15.	14.	8.	8.	6.	0.	
25000.	1071.	6.	8.	5.	5.	6.	9.	16.	17.	10.	7.	7.	0.	
30000.	1013.	7.	6.	4.	4.	4.	10.	14.	19.	11.	8.	7.	0.	
35000.	881.	6.	5.	5.	3.	3.	8.	13.	21.	9.	9.	9.	1.	
40000.	760.	6.	5.	4.	4.	4.	6.	10.	23.	10.	10.	12.	1.	
45000.	681.	7.	6.	3.	4.	4.	7.	11.	21.	9.	9.	11.	0.	
50000.	634.	7.	7.	5.	6.	6.	6.	13.	17.	8.	8.	7.	0.	
55000.	557.	6.	8.	10.	15.	8.	8.	9.	11.	6.	5.	3.	0.	
60000.	521.	2.	8.	24.	31.	8.	5.	3.	1.	1.	2.	1.	0.	
65000.	481.	1.	3.	35.	49.	1.	0.	0.	0.	0.	0.	0.	0.	
70000.	456.	0.	1.	34.	59.	1.	0.	0.	0.	0.	0.	0.	0.	
75000.	435.	0.	0.	39.	57.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	420.	0.	0.	36.	61.	0.	0.	0.	0.	0.	0.	0.	0.	
85000.	401.	0.	0.	43.	56.	0.	0.	0.	0.	0.	0.	0.	0.	
90000.	371.	0.	0.	43.	55.	0.	0.	0.	0.	0.	0.	0.	0.	
95000.	339.	0.	0.	37.	59.	0.	0.	0.	0.	0.	0.	0.	0.	
100000.	296.	0.	1.	29.	67.	0.	0.	0.	0.	0.	0.	0.	1.	

TABLE VI (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR WIND DIRECTIONS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FT.	TOTAL ORS	WIND DIRECTIONS (DEGREES)												CALM	
		360 30	330 60	300 90	270 120	240 150	210 180	180 210	150 240	120 270	90 300	60 330	30 360	270 300	240 330
4940.	1039.	13.	10.	5.	2.	2.	5.	12.	8.	4.	2.	2.	8.	2.	25.
5000.	1187.	14.	8.	5.	2.	2.	5.	12.	9.	4.	2.	3.	13.	3.	22.
6000.	1185.	8.	6.	8.	6.	3.	5.	13.	11.	4.	7.	9.	18.	1.	1.
7000.	1187.	5.	4.	4.	2.	3.	7.	17.	18.	9.	6.	10.	14.	0.	0.
8000.	1188.	5.	4.	3.	2.	2.	5.	15.	20.	12.	8.	12.	11.	0.	0.
9000.	1190.	4.	4.	3.	2.	2.	4.	13.	19.	14.	11.	14.	11.	0.	0.
10000.	1190.	4.	4.	3.	2.	2.	4.	10.	19.	15.	13.	15.	9.	0.	0.
11000.	1190.	5.	3.	2.	1.	3.	4.	8.	17.	20.	14.	14.	9.	0.	0.
12000.	1187.	4.	4.	2.	2.	3.	3.	7.	15.	21.	16.	15.	8.	0.	0.
13000.	1187.	4.	3.	2.	2.	3.	3.	6.	15.	22.	18.	13.	9.	0.	0.
14000.	1187.	5.	3.	2.	2.	3.	2.	6.	16.	22.	17.	13.	11.	0.	0.
15000.	1183.	5.	2.	2.	2.	2.	2.	5.	16.	22.	18.	11.	12.	0.	0.
16000.	1183.	5.	3.	2.	3.	2.	2.	5.	15.	24.	17.	11.	11.	0.	0.
18000.	1179.	6.	2.	1.	1.	2.	2.	4.	16.	24.	17.	11.	11.	0.	0.
20000.	1162.	7.	2.	1.	1.	1.	2.	6.	16.	25.	18.	12.	9.	0.	0.
25000.	1080.	6.	2.	1.	1.	1.	1.	6.	16.	25.	19.	13.	8.	0.	0.
30000.	1012.	5.	2.	1.	1.	1.	1.	5.	17.	26.	21.	12.	7.	1.	1.
35000.	887.	5.	2.	1.	0.	0.	1.	3.	13.	32.	25.	9.	5.	4.	4.
40000.	776.	3.	1.	1.	0.	1.	0.	2.	12.	37.	27.	10.	5.	2.	2.
45000.	700.	3.	0.	0.	0.	0.	0.	2.	11.	40.	33.	8.	3.	0.	0.
50000.	661.	2.	1.	0.	0.	0.	0.	2.	10.	40.	31.	9.	3.	1.	1.
55000.	582.	2.	1.	0.	1.	1.	0.	5.	13.	32.	29.	11.	5.	1.	1.
60000.	550.	5.	3.	5.	4.	3.	5.	5.	12.	19.	18.	12.	8.	0.	0.
65000.	525.	5.	6.	7.	11.	6.	4.	5.	10.	15.	15.	7.	8.	0.	0.
70000.	503.	5.	6.	17.	11.	8.	2.	4.	7.	11.	14.	9.	5.	0.	0.
75000.	478.	5.	5.	20.	16.	6.	2.	4.	5.	13.	13.	6.	4.	0.	0.
80000.	457.	3.	6.	19.	18.	6.	2.	1.	4.	17.	12.	5.	5.	1.	1.
85000.	431.	4.	6.	17.	17.	5.	2.	2.	4.	16.	16.	8.	3.	1.	1.
90000.	396.	2.	4.	16.	17.	4.	3.	3.	2.	23.	15.	6.	3.	1.	1.
95000.	343.	3.	4.	16.	16.	3.	2.	2.	5.	21.	20.	3.	4.	2.	2.
100000.	290.	2.	1.	14.	17.	6.	2.	4.	3.	23.	19.	3.	2.	3.	3.

TABLE VII

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

WINTER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)																>100 125	>125 150	>150					
			<10	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159								
4940.	1075.	31.	52.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	1269.	27.	55.	18.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	1269.	0.	63.	32.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	1269.	0.	39.	47.	12.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	1265.	0.	26.	49.	19.	4.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	1274.	0.	18.	48.	25.	7.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	1277.	0.	13.	41.	31.	11.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	1278.	0.	11.	33.	34.	15.	0.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	1279.	0.	10.	27.	31.	21.	0.	7.	3.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	1279.	0.	9.	23.	31.	21.	0.	11.	5.	2.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	1277.	0.	8.	20.	29.	23.	0.	11.	7.	7.	0.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	1272.	0.	7.	18.	27.	23.	0.	13.	7.	7.	0.	0.	5.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	1271.	0.	7.	15.	25.	23.	0.	14.	7.	7.	0.	0.	6.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	1261.	0.	5.	13.	22.	23.	0.	15.	10.	10.	0.	0.	6.	4.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	1226.	0.	4.	13.	18.	21.	0.	16.	11.	11.	0.	0.	9.	5.	0.	0.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	1132.	0.	2.	8.	15.	16.	0.	13.	13.	13.	0.	0.	11.	6.	0.	0.	6.	3.	0.	4.	0.	0.	0.	0.	0.	0.
30000.	1032.	0.	3.	6.	12.	12.	0.	12.	11.	11.	0.	0.	12.	8.	0.	0.	8.	6.	0.	7.	0.	2.	0.	0.	0.	0.
35000.	904.	2.	2.	4.	9.	9.	0.	13.	10.	10.	0.	0.	11.	10.	0.	0.	9.	6.	0.	11.	0.	4.	1.	0.	0.	0.
40000.	813.	0.	1.	3.	6.	9.	0.	11.	12.	12.	0.	0.	13.	14.	0.	0.	8.	9.	0.	9.	0.	3.	1.	0.	0.	0.
45000.	722.	0.	1.	3.	3.	12.	0.	14.	17.	17.	0.	0.	15.	14.	0.	0.	11.	6.	0.	4.	0.	0.	0.	0.	0.	0.
50000.	628.	0.	1.	4.	8.	14.	0.	18.	19.	19.	0.	0.	17.	11.	0.	0.	4.	2.	0.	1.	0.	0.	0.	0.	0.	0.
55000.	523.	0.	2.	7.	16.	19.	0.	24.	15.	15.	0.	0.	11.	6.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	489.	0.	8.	25.	28.	22.	0.	8.	6.	6.	0.	0.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	456.	1.	22.	38.	23.	9.	0.	5.	1.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	414.	0.	33.	38.	19.	7.	0.	4.	0.	0.	0.	0.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	396.	0.	34.	38.	17.	6.	0.	3.	1.	1.	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	365.	0.	26.	38.	19.	10.	0.	4.	2.	2.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	348.	0.	24.	30.	19.	14.	0.	7.	4.	4.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	322.	0.	17.	30.	17.	15.	0.	8.	4.	4.	0.	0.	4.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	304.	0.	11.	26.	19.	13.	0.	11.	7.	7.	0.	0.	3.	4.	0.	0.	1.	2.	0.	1.	0.	0.	0.	0.	0.	0.
100000.	239.	1.	8.	19.	16.	19.	0.	8.	8.	8.	0.	0.	7.	3.	0.	0.	4.	3.	0.	4.	0.	1.	0.	0.	0.	0.

TABLE VII (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	1 10	10		20		30		40		50		60		70		80		90		100		125		150	
				20	27.	30	4.	40	0.	50	0.	60	0.	70	0.	80	0.	90	0.	100	0.	125	0.	150	0.	150	0.
4940.	1302.	17.	53.	27.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5000.	1552.	14.	54.	28.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6000.	1553.	0.	55.	36.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
7000.	1553.	0.	42.	42.	13.	3.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8000.	1552.	0.	34.	45.	17.	4.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9000.	1555.	0.	28.	46.	20.	5.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10000.	1555.	0.	23.	43.	24.	8.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11000.	1549.	0.	19.	40.	25.	12.	25.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12000.	1548.	0.	16.	35.	29.	13.	29.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13000.	1546.	0.	13.	30.	29.	17.	29.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
14000.	1543.	0.	11.	26.	29.	17.	29.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
15000.	1539.	0.	9.	22.	30.	17.	30.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16000.	1537.	0.	9.	19.	28.	20.	28.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
18000.	1525.	0.	7.	16.	24.	20.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20000.	1480.	0.	5.	15.	19.	20.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25000.	1372.	0.	3.	12.	13.	15.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30000.	1266.	1.	2.	9.	11.	12.	11.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
35000.	1015.	2.	1.	6.	9.	10.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	844.	2.	0.	4.	9.	10.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	766.	1.	1.	4.	13.	12.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	670.	0.	1.	5.	13.	19.	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	553.	0.	3.	16.	24.	22.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	499.	1.	22.	36.	23.	11.	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	452.	1.	45.	35.	14.	4.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	418.	0.	58.	33.	6.	1.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	390.	0.	51.	39.	7.	1.	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	359.	0.	44.	37.	14.	3.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	339.	1.	40.	38.	17.	3.	17.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	316.	0.	32.	41.	18.	5.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	280.	2.	24.	34.	23.	11.	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	211.	2.	18.	31.	24.	11.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE VII (CONT)

RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	>1 <10	10		20		30		40		50		60		70		80		90		100		125		150	
				<10	>10	<20	>20	<30	>30	<40	>40	<50	>50	<60	>60	<70	>70	<80	>80	<90	>90	<100	>100	<125	>125	<150	>150
4940.	1090.	21.	63.		16.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
5000.	1162.	20.	64.		16.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
6000.	1163.	1.	78.		19.		1.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
7000.	1163.	1.	66.		30.		4.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
8000.	1164.	0.	60.		34.		5.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
9000.	1168.	0.	58.		35.		6.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
10000.	1172.	0.	55.		38.		6.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
11000.	1175.	0.	51.		40.		8.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
12000.	1178.	0.	47.		41.		10.		2.		2.		0.		0.		0.		0.		0.		0.		0.		0.
13000.	1177.	0.	43.		41.		12.		3.		3.		1.		0.		0.		0.		0.		0.		0.		0.
14000.	1176.	0.	40.		43.		11.		5.		5.		1.		0.		0.		0.		0.		0.		0.		0.
15000.	1173.	0.	36.		45.		12.		5.		5.		2.		0.		0.		0.		0.		0.		0.		0.
16000.	1170.	0.	32.		47.		13.		6.		6.		2.		0.		0.		0.		0.		0.		0.		0.
18000.	1161.	0.	31.		43.		16.		6.		6.		3.		1.		0.		0.		0.		0.		0.		0.
20000.	1147.	0.	32.		42.		15.		6.		6.		3.		1.		0.		0.		0.		0.		0.		0.
25000.	1071.	0.	26.		41.		18.		7.		7.		4.		3.		0.		0.		0.		0.		0.		0.
30000.	1013.	0.	18.		33.		25.		12.		12.		6.		3.		0.		0.		0.		0.		0.		0.
35000.	881.	1.	11.		29.		25.		14.		14.		10.		5.		1.		1.		0.		0.		0.		0.
40000.	760.	1.	10.		25.		23.		17.		17.		9.		7.		2.		2.		0.		0.		0.		0.
45000.	681.	0.	12.		29.		21.		15.		15.		10.		6.		1.		1.		0.		0.		0.		0.
50000.	634.	0.	26.		34.		19.		11.		11.		6.		3.		0.		0.		0.		0.		0.		0.
55000.	557.	0.	39.		47.		12.		3.		3.		0.		0.		0.		0.		0.		0.		0.		0.
60000.	521.	1.	31.		56.		12.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
65000.	481.	0.	15.		53.		30.		1.		1.		0.		0.		0.		0.		0.		0.		0.		0.
70000.	456.	0.	7.		43.		43.		6.		6.		0.		0.		0.		0.		0.		0.		0.		0.
75000.	435.	0.	2.		28.		57.		14.		14.		0.		0.		0.		0.		0.		0.		0.		0.
80000.	420.	0.	2.		18.		51.		28.		28.		1.		0.		0.		0.		0.		0.		0.		0.
85000.	401.	0.	3.		12.		39.		40.		40.		6.		0.		0.		0.		0.		0.		0.		0.
90000.	371.	0.	2.		11.		31.		41.		41.		15.		1.		0.		0.		0.		0.		0.		0.
95000.	339.	1.	1.		8.		21.		46.		46.		21.		2.		0.		0.		0.		0.		0.		0.
100000.	296.	1.	2.		5.		20.		40.		40.		28.		3.		1.		0.		0.		0.		0.		0.

TABLE VII (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR SCALAR WIND SPEEDS AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FT.	TOTAL OBS	CALM	WIND SPEED (KNOTS)															
			≥ 1 < 10	≥ 10 < 20	≥ 20 < 30	≥ 30 < 40	≥ 40 < 50	≥ 50 < 60	≥ 60 < 70	≥ 70 < 80	≥ 80 < 90	≥ 90 < 100	≥ 100 < 125	≥ 125 < 150	≥ 150			
4940.	1039.	25.	59.	15.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
5000.	1187.	22.	62.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
6000.	1185.	1.	70.	27.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
7000.	1187.	0.	54.	37.	7.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
8000.	1188.	0.	43.	42.	12.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
9000.	1190.	0.	36.	45.	15.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
10000.	1190.	0.	30.	46.	19.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
11000.	1190.	0.	25.	43.	22.	8.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
12000.	1187.	0.	22.	40.	23.	11.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
13000.	1187.	0.	20.	37.	24.	11.	6.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
14000.	1187.	0.	19.	35.	23.	12.	8.	2.	1.	0.	0.	0.	0.	0.	0.	0.		
15000.	1183.	0.	19.	33.	22.	14.	8.	4.	1.	0.	0.	0.	0.	0.	0.	0.		
16000.	1183.	0.	17.	32.	22.	15.	7.	5.	2.	0.	0.	0.	0.	0.	0.	0.		
18000.	1179.	0.	15.	28.	22.	16.	9.	5.	3.	1.	0.	0.	0.	0.	0.	0.		
20000.	1162.	0.	14.	25.	22.	16.	10.	7.	5.	2.	0.	0.	0.	0.	0.	0.		
25000.	1080.	0.	9.	19.	22.	18.	12.	8.	5.	4.	1.	1.	0.	0.	0.	0.		
30000.	1012.	1.	5.	11.	17.	17.	16.	10.	7.	6.	3.	2.	1.	0.	0.	0.		
35000.	887.	4.	3.	8.	12.	13.	16.	16.	15.	15.	7.	7.	4.	1.	0.	0.		
40000.	776.	2.	2.	6.	9.	14.	15.	15.	14.	13.	12.	13.	4.	1.	0.	0.		
45000.	700.	0.	2.	6.	12.	14.	21.	14.	13.	14.	10.	10.	2.	0.	0.	0.		
50000.	661.	1.	3.	11.	22.	19.	18.	13.	13.	9.	3.	3.	0.	0.	0.	0.		
55000.	582.	1.	11.	31.	24.	14.	9.	2.	6.	3.	1.	1.	0.	0.	0.	0.		
60000.	550.	0.	37.	38.	15.	6.	2.	1.	1.	0.	0.	0.	0.	0.	0.	0.		
65000.	525.	0.	47.	39.	8.	4.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
70000.	503.	0.	46.	40.	10.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
75000.	478.	0.	42.	38.	15.	3.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.		
80000.	457.	1.	36.	37.	20.	4.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.		
85000.	431.	1.	30.	39.	20.	6.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.		
90000.	396.	1.	26.	32.	24.	10.	2.	2.	2.	0.	0.	0.	0.	0.	0.	0.		
95000.	343.	2.	20.	31.	23.	12.	4.	3.	2.	1.	0.	0.	0.	0.	0.	0.		
100000.	290.	3.	17.	27.	21.	14.	9.	3.	3.	3.	1.	1.	0.	0.	0.	0.		

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR TEMPERATURE DATA

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TABLE VIII
MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JANUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	350.	18.	5.	-22.
5000.	417.	20.	5.	-21.
6000.	418.	17.	4.	-17.
7000.	417.	14.	3.	-17.
8000.	417.	11.	2.	-19.
9000.	418.	9.	0.	-20.
10000.	417.	8.	-1.	-20.
11000.	419.	8.	-3.	-21.
12000.	419.	6.	-4.	-23.
13000.	418.	5.	-6.	-25.
14000.	418.	3.	-8.	-27.
15000.	416.	0.	-10.	-29.
16000.	415.	-2.	-12.	-31.
18000.	411.	-6.	-16.	-33.
20000.	394.	-9.	-21.	-35.
25000.	361.	-22.	-32.	-47.
30000.	338.	-34.	-44.	-54.
35000.	298.	-43.	-53.	-61.
40000.	274.	-44.	-57.	-68.
45000.	248.	-49.	-59.	-76.
50000.	213.	-52.	-62.	-73.
55000.	179.	-53.	-65.	-78.
60000.	164.	-54.	-64.	-79.
65000.	153.	-53.	-62.	-75.
70000.	146.	-51.	-60.	-69.
75000.	137.	-50.	-58.	-63.
80000.	121.	-47.	-56.	-63.
85000.	115.	-46.	-54.	-64.
90000.	102.	-42.	-52.	-60.
95000.	97.	-39.	-50.	-59.
100000.	75.	-37.	-48.	-59.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FEBRUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	365.	25.	7.	-12.
5000.	473.	24.	7.	-11.
6000.	473.	21.	5.	-13.
7000.	473.	18.	3.	-14.
8000.	470.	15.	1.	-16.
9000.	470.	12.	-1.	-15.
10000.	470.	10.	-2.	-17.
11000.	469.	9.	-4.	-18.
12000.	468.	6.	-6.	-21.
13000.	468.	4.	-8.	-24.
14000.	466.	3.	-10.	-26.
15000.	464.	1.	-11.	-29.
16000.	465.	0.	-13.	-31.
18000.	462.	-5.	-18.	-36.
20000.	450.	-10.	-22.	-40.
25000.	408.	-21.	-33.	-47.
30000.	371.	-33.	-44.	-53.
35000.	319.	-35.	-53.	-61.
40000.	289.	-43.	-56.	-69.
45000.	258.	-48.	-57.	-72.
50000.	225.	-52.	-62.	-71.
55000.	187.	-52.	-64.	-74.
60000.	171.	-54.	-64.	-72.
65000.	152.	-55.	-62.	-71.
70000.	127.	-53.	-60.	-68.
75000.	118.	-52.	-58.	-66.
80000.	108.	-49.	-56.	-65.
85000.	105.	-46.	-54.	-66.
90000.	98.	-44.	-51.	-64.
95000.	91.	-42.	-48.	-59.
100000.	69.	-36.	-45.	-55.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH		
		MAXIMUM	MEAN	MINIMUM
4940.	388.	28.	10.	-9.
5000.	482.	27.	10.	-9.
6000.	483.	22.	7.	-9.
7000.	483.	20.	5.	-11.
8000.	482.	17.	3.	-13.
9000.	481.	14.	1.	-16.
10000.	480.	11.	-2.	-17.
11000.	476.	9.	-4.	-19.
12000.	475.	7.	-6.	-22.
13000.	475.	4.	-8.	-24.
14000.	473.	2.	-10.	-27.
15000.	473.	0.	-12.	-29.
16000.	473.	-2.	-14.	-30.
18000.	472.	-6.	-18.	-35.
20000.	463.	-10.	-22.	-39.
25000.	416.	-21.	-33.	-45.
30000.	377.	-34.	-44.	-53.
35000.	313.	-40.	-53.	-61.
40000.	253.	-46.	-56.	-68.
45000.	232.	-48.	-57.	-69.
50000.	202.	-49.	-61.	-70.
55000.	169.	-49.	-62.	-71.
60000.	147.	-52.	-61.	-70.
65000.	131.	-54.	-60.	-69.
70000.	124.	-52.	-58.	-64.
75000.	113.	-50.	-56.	-63.
80000.	105.	-49.	-54.	-60.
85000.	100.	-43.	-52.	-58.
90000.	89.	-41.	-50.	-56.
95000.	81.	-35.	-47.	-54.
100000.	62.	-32.	-44.	-51.

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MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	417.	27.	16.	-1.
5000.	534.	28.	15.	0.
6000.	534.	23.	12.	-1.
7000.	533.	20.	10.	-4.
8000.	531.	18.	7.	-7.
9000.	533.	15.	5.	-9.
10000.	533.	12.	3.	-12.
11000.	533.	9.	0.	-14.
12000.	532.	7.	-2.	-16.
13000.	532.	6.	-4.	-19.
14000.	532.	3.	-6.	-20.
15000.	532.	1.	-8.	-22.
16000.	531.	-2.	-10.	-24.
18000.	525.	-6.	-15.	-29.
20000.	501.	-10.	-19.	-34.
25000.	458.	-22.	-30.	-44.
30000.	431.	-34.	-41.	-54.
35000.	333.	-43.	-52.	-59.
40000.	272.	-43.	-57.	-67.
45000.	244.	-51.	-58.	-72.
50000.	222.	-51.	-61.	-71.
55000.	188.	-53.	-62.	-72.
60000.	169.	-55.	-63.	-73.
65000.	158.	-55.	-60.	-67.
70000.	146.	-52.	-57.	-63.
75000.	139.	-50.	-55.	-62.
80000.	125.	-47.	-52.	-59.
85000.	116.	-45.	-50.	-55.
90000.	110.	-43.	-47.	-54.
95000.	98.	-39.	-44.	-52.
100000.	74.	-34.	-41.	-50.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	MAY			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	413.	33.	21.	2.
5000.	462.	33.	20.	3.
6000.	462.	30.	17.	2.
7000.	462.	26.	15.	-1.
8000.	462.	23.	13.	-3.
9000.	462.	20.	10.	-6.
10000.	462.	16.	8.	-8.
11000.	459.	14.	5.	-10.
12000.	457.	10.	3.	-13.
13000.	455.	7.	0.	-15.
14000.	453.	5.	-2.	-17.
15000.	450.	4.	-4.	-21.
16000.	449.	1.	-6.	-23.
18000.	445.	-4.	-11.	-26.
20000.	435.	-9.	-15.	-30.
25000.	419.	-19.	-26.	-37.
30000.	386.	-31.	-38.	-47.
35000.	307.	-44.	-50.	-57.
40000.	263.	-50.	-58.	-64.
45000.	248.	-53.	-60.	-69.
50000.	222.	-54.	-62.	-71.
55000.	181.	-55.	-63.	-74.
60000.	169.	-57.	-63.	-71.
65000.	151.	-55.	-60.	-66.
70000.	139.	-52.	-57.	-61.
75000.	129.	-50.	-54.	-58.
80000.	124.	-47.	-51.	-55.
85000.	119.	-42.	-48.	-53.
90000.	113.	-40.	-45.	-50.
95000.	97.	-35.	-42.	-48.
100000.	74.	-33.	-40.	-45.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
4940.	320.	38.	25.	12.
5000.	351.	38.	25.	12.
6000.	352.	34.	22.	13.
7000.	351.	30.	19.	10.
8000.	352.	27.	17.	8.
9000.	351.	24.	15.	6.
10000.	352.	21.	12.	3.
11000.	349.	18.	10.	0.
12000.	351.	15.	7.	-3.
13000.	349.	12.	5.	-5.
14000.	348.	9.	3.	-6.
15000.	346.	6.	0.	-8.
16000.	347.	4.	-2.	-9.
18000.	344.	-0.	-7.	-13.
20000.	338.	-4.	-11.	-17.
25000.	317.	-10.	-22.	-28.
30000.	297.	-22.	-33.	-40.
35000.	247.	-34.	-44.	-51.
40000.	213.	-45.	-55.	-63.
45000.	195.	-53.	-61.	-68.
50000.	185.	-58.	-65.	-73.
55000.	169.	-58.	-67.	-74.
60000.	156.	-58.	-64.	-69.
65000.	137.	-55.	-59.	-65.
70000.	131.	-51.	-56.	-60.
75000.	126.	-49.	-53.	-56.
80000.	122.	-45.	-50.	-54.
85000.	116.	-42.	-47.	-52.
90000.	110.	-38.	-45.	-51.
95000.	97.	-35.	-42.	-49.
100000.	83.	-31.	-39.	-46.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JULY		
		MAXIMUM	MEAN	MINIMUM
4940.	320.	38.	26.	17.
5000.	350.	38.	26.	17.
6000.	350.	33.	23.	15.
7000.	350.	30.	21.	13.
8000.	351.	27.	19.	11.
9000.	351.	24.	16.	9.
10000.	351.	21.	14.	3.
11000.	354.	18.	12.	3.
12000.	354.	16.	9.	0.
13000.	354.	13.	7.	0.
14000.	354.	10.	5.	1.
15000.	353.	7.	3.	-2.
16000.	352.	5.	0.	-5.
18000.	350.	2.	-4.	-8.
20000.	345.	-3.	-8.	-12.
25000.	317.	-13.	-17.	-22.
30000.	297.	-24.	-28.	-33.
35000.	261.	-36.	-40.	-44.
40000.	221.	-48.	-52.	-56.
45000.	196.	-57.	-62.	-65.
50000.	185.	-63.	-69.	-74.
55000.	162.	-65.	-69.	-75.
60000.	153.	-59.	-65.	-71.
65000.	141.	-55.	-60.	-65.
70000.	135.	-53.	-56.	-60.
75000.	129.	-50.	-53.	-57.
80000.	127.	-45.	-50.	-55.
85000.	119.	-42.	-48.	-52.
90000.	113.	-36.	-45.	-51.
95000.	107.	-37.	-43.	-51.
100000.	97.	-34.	-40.	-48.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST		
		MAXIMUM	MEAN	MINIMUM
4940.	355.	35.	25.	15.
5000.	384.	35.	24.	14.
6000.	384.	32.	22.	14.
7000.	385.	30.	20.	12.
8000.	385.	26.	18.	10.
9000.	385.	23.	15.	8.
10000.	384.	21.	13.	5.
11000.	384.	17.	11.	3.
12000.	384.	14.	8.	2.
13000.	385.	12.	6.	0.
14000.	385.	10.	4.	-1.
15000.	384.	8.	2.	-4.
16000.	382.	5.	-0.	-6.
18000.	378.	1.	-4.	-9.
20000.	375.	-4.	-8.	-12.
25000.	358.	-13.	-18.	-22.
30000.	344.	-23.	-29.	-36.
35000.	308.	-35.	-40.	-46.
40000.	277.	-47.	-52.	-56.
45000.	242.	-56.	-62.	-66.
50000.	220.	-62.	-69.	-74.
55000.	195.	-62.	-69.	-76.
60000.	183.	-60.	-64.	-69.
65000.	175.	-55.	-59.	-65.
70000.	165.	-52.	-56.	-60.
75000.	158.	-50.	-53.	-57.
80000.	151.	-47.	-51.	-55.
85000.	147.	-45.	-48.	-52.
90000.	131.	-40.	-46.	-50.
95000.	118.	-37.	-43.	-49.
100000.	102.	-37.	-41.	-46.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	SEPTEMBER			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	322.	33.	22.	7.
5000.	364.	33.	21.	8.
6000.	363.	29.	19.	8.
7000.	364.	26.	17.	6.
8000.	364.	23.	14.	4.
9000.	365.	20.	12.	1.
10000.	364.	17.	10.	0.
11000.	363.	14.	8.	-3.
12000.	363.	11.	5.	-5.
13000.	363.	8.	3.	-6.
14000.	363.	6.	1.	-8.
15000.	362.	4.	-1.	-10.
16000.	362.	2.	-2.	-13.
18000.	361.	0.	-6.	-18.
20000.	359.	-4.	-10.	-22.
25000.	346.	-15.	-20.	-33.
30000.	326.	-25.	-32.	-45.
35000.	278.	-37.	-43.	-49.
40000.	253.	-47.	-53.	-60.
45000.	232.	-53.	-61.	-65.
50000.	219.	-58.	-68.	-74.
55000.	196.	-58.	-69.	-76.
60000.	184.	-55.	-65.	-70.
65000.	174.	-54.	-60.	-65.
70000.	163.	-51.	-57.	-63.
75000.	156.	-49.	-54.	-58.
80000.	150.	-47.	-51.	-55.
85000.	142.	-45.	-49.	-52.
90000.	131.	-42.	-47.	-51.
95000.	115.	-41.	-45.	-49.
100000.	102.	-36.	-42.	-48.

MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	367.	29.	17.	1.
5000.	417.	28.	17.	0.
6000.	417.	25.	15.	-3.
7000.	416.	23.	13.	-5.
8000.	417.	20.	11.	-5.
9000.	418.	17.	9.	-7.
10000.	418.	14.	7.	-9.
11000.	418.	11.	5.	-11.
12000.	418.	10.	3.	-13.
13000.	418.	9.	1.	-15.
14000.	417.	7.	-1.	-18.
15000.	416.	5.	-3.	-20.
16000.	414.	3.	-4.	-19.
18000.	413.	-2.	-8.	-23.
20000.	410.	-5.	-13.	-27.
25000.	388.	-16.	-24.	-31.
30000.	362.	-27.	-36.	-44.
35000.	314.	-38.	-47.	-55.
40000.	288.	-47.	-55.	-64.
45000.	255.	-50.	-62.	-71.
50000.	247.	-56.	-67.	-73.
55000.	219.	-57.	-68.	-75.
60000.	210.	-58.	-65.	-71.
65000.	201.	-55.	-61.	-68.
70000.	195.	-53.	-58.	-63.
75000.	185.	-50.	-55.	-59.
80000.	175.	-48.	-53.	-57.
85000.	165.	-45.	-50.	-55.
90000.	152.	-44.	-49.	-53.
95000.	134.	-41.	-47.	-52.
100000.	115.	-40.	-45.	-51.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	348.	25.	11.	-3.
5000.	408.	23.	11.	-3.
6000.	407.	20.	9.	-5.
7000.	407.	19.	7.	-6.
8000.	408.	18.	5.	-8.
9000.	407.	15.	4.	-10.
10000.	407.	13.	2.	-12.
11000.	407.	11.	1.	-13.
12000.	404.	10.	-1.	-15.
13000.	403.	8.	-3.	-15.
14000.	403.	6.	-4.	-18.
15000.	402.	4.	-6.	-20.
16000.	402.	3.	-8.	-21.
18000.	401.	-2.	-12.	-25.
20000.	390.	-7.	-17.	-29.
25000.	345.	-17.	-27.	-40.
30000.	322.	-27.	-38.	-47.
35000.	293.	-39.	-49.	-59.
40000.	233.	-47.	-57.	-66.
45000.	210.	-50.	-62.	-71.
50000.	193.	-53.	-65.	-77.
55000.	164.	-57.	-67.	-78.
60000.	152.	-55.	-65.	-73.
65000.	148.	-57.	-62.	-70.
70000.	143.	-53.	-60.	-66.
75000.	134.	-53.	-58.	-62.
80000.	130.	-49.	-55.	-61.
85000.	123.	-44.	-53.	-59.
90000.	113.	-38.	-51.	-58.
95000.	94.	-40.	-48.	-55.
100000.	74.	-33.	-46.	-56.

TABLE VIII (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	297.	19.	5.	-10.
5000.	328.	19.	5.	-8.
6000.	329.	17.	4.	-8.
7000.	329.	14.	3.	-9.
8000.	329.	12.	2.	-8.
9000.	329.	10.	0.	-10.
10000.	329.	9.	-1.	-12.
11000.	329.	7.	-3.	-14.
12000.	329.	6.	-4.	-17.
13000.	329.	5.	-6.	-19.
14000.	329.	3.	-7.	-21.
15000.	328.	1.	-9.	-23.
16000.	328.	-2.	-11.	-26.
18000.	326.	-7.	-15.	-29.
20000.	321.	-12.	-20.	-32.
25000.	305.	-23.	-31.	-42.
30000.	273.	-32.	-42.	-50.
35000.	242.	-33.	-52.	-61.
40000.	216.	-42.	-57.	-67.
45000.	187.	-51.	-60.	-71.
50000.	175.	-53.	-63.	-71.
55000.	153.	-54.	-65.	-75.
60000.	149.	-56.	-64.	-73.
65000.	146.	-54.	-63.	-74.
70000.	138.	-51.	-60.	-66.
75000.	136.	-52.	-59.	-64.
80000.	132.	-51.	-57.	-62.
85000.	126.	-47.	-55.	-64.
90000.	120.	-44.	-53.	-62.
95000.	113.	-40.	-51.	-60.
100000.	92.	-32.	-48.	-57.

TABLE IX
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL ORS	TEMPERATURE DEGREES CELSIUS										
		>-30 <-30	>-25 <-25	>-20 <-20	>-15 <-15	>-10 <-10	>-5 <-5	>0 <5	>5 <10	>10 <15	>15 <20	>20 <25
4940.	350.	0.	0.	1.	1.	5.	15.	24.	27.	21.	6.	0.
5000.	417.	0.	0.	0.	1.	4.	15.	25.	27.	21.	6.	0.
6000.	418.	0.	0.	1.	1.	4.	12.	34.	35.	13.	0.	0.
7000.	417.	0.	0.	1.	1.	5.	17.	37.	34.	5.	0.	0.
8000.	417.	0.	0.	1.	2.	5.	20.	41.	29.	1.	0.	0.
9000.	418.	0.	0.	1.	2.	8.	27.	45.	17.	0.	0.	0.
10000.	417.	0.	0.	2.	3.	10.	38.	41.	6.	0.	0.	0.
11000.	419.	0.	1.	2.	5.	17.	43.	32.	1.	0.	0.	0.
12000.	419.	0.	1.	1.	7.	28.	42.	19.	0.	0.	0.	0.
13000.	418.	0.	2.	3.	10.	37.	42.	5.	0.	0.	0.	0.
14000.	418.	0.	1.	6.	20.	42.	29.	1.	0.	0.	0.	0.
15000.	416.	0.	1.	9.	31.	42.	13.	1.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE DEGREES CELSIUS										
		>-55 <-55	>-50 <-50	>-45 <-45	>-40 <-40	>-35 <-35	>-30 <-30	>-25 <-25	>-20 <-20	>-15 <-15	>-10 <-10	>-5 <-5
16000.	415.	0.	0.	0.	0.	0.	1.	4.	12.	41.	39.	2.
18000.	411.	0.	0.	0.	0.	1.	4.	11.	35.	41.	8.	0.
20000.	394.	0.	0.	0.	0.	4.	10.	32.	41.	11.	1.	0.
25000.	361.	0.	0.	1.	18.	42.	29.	5.	0.	0.	0.	0.
30000.	338.	0.	5.	32.	17.	1.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		-85	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	
35000.	298.	0.	0.	0.	0.	0.	1.	28.	53.	17.	1.	0.	0.	0.	
40000.	274.	0.	0.	0.	0.	6.	29.	28.	24.	12.	0.	0.	0.	0.	
45000.	248.	0.	0.	0.	2.	6.	29.	40.	21.	1.	0.	0.	0.	0.	
50000.	213.	0.	0.	0.	2.	22.	47.	27.	2.	0.	0.	0.	0.	0.	
55000.	179.	0.	0.	1.	9.	32.	44.	12.	2.	0.	0.	0.	0.	0.	
60000.	164.	0.	0.	1.	7.	30.	45.	13.	3.	0.	0.	0.	0.	0.	
65000.	153.	0.	0.	0.	3.	12.	62.	20.	3.	0.	0.	0.	0.	0.	
70000.	146.	0.	0.	0.	0.	4.	44.	45.	7.	0.	0.	0.	0.	0.	
75000.	137.	0.	0.	0.	0.	3.	23.	61.	12.	1.	0.	0.	0.	0.	
80000.	121.	0.	0.	0.	0.	0.	8.	50.	36.	5.	0.	0.	0.	0.	
85000.	115.	0.	0.	0.	0.	0.	2.	39.	50.	10.	0.	0.	0.	0.	
90000.	102.	0.	0.	0.	0.	0.	0.	17.	55.	27.	1.	0.	0.	0.	
95000.	97.	0.	0.	0.	0.	0.	0.	6.	41.	40.	11.	1.	0.	0.	
100000.	75.	0.	0.	0.	0.	0.	0.	5.	16.	53.	21.	4.	0.	0.	

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

FEBRUARY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		<-30	>-30	<-25	>-25	<-20	>-20	<-15	>-15	<-10	>-10	<-5	>-5
4940.	366.	0.	0.	0.	0.	0.	0.	1.	4.	9.	24.	28.	19.
5000.	473.	0.	0.	0.	0.	0.	0.	0.	3.	9.	23.	31.	22.
6000.	473.	0.	0.	0.	0.	0.	0.	0.	3.	14.	32.	33.	15.
7000.	473.	0.	0.	0.	0.	0.	0.	1.	4.	22.	34.	29.	10.
8000.	470.	0.	0.	0.	0.	0.	0.	1.	10.	26.	35.	24.	4.
9000.	470.	0.	0.	0.	0.	0.	0.	2.	17.	32.	33.	14.	1.
10000.	470.	0.	0.	0.	0.	1.	0.	6.	20.	35.	33.	6.	0.
11000.	469.	0.	0.	0.	0.	2.	0.	11.	27.	37.	21.	3.	0.
12000.	468.	0.	0.	0.	0.	4.	0.	15.	32.	41.	8.	0.	0.
13000.	468.	0.	0.	1.	0.	8.	0.	22.	35.	30.	5.	0.	0.
14000.	466.	0.	0.	3.	0.	10.	0.	26.	42.	18.	1.	0.	0.
15000.	464.	0.	0.	6.	0.	13.	0.	37.	37.	6.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		<-55	>-55	<-50	>-50	<-45	>-45	<-40	>-40	<-35	>-35	<-30	>-30
16000.	465.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	8.
18000.	462.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	17.	44.
20000.	450.	0.	0.	0.	0.	0.	0.	1.	6.	15.	41.	33.	28.
25000.	408.	0.	0.	1.	0.	6.	0.	22.	47.	19.	3.	0.	4.
30000.	371.	0.	5.	35.	49.	11.	1.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	-85		-80		-75		-70		-65		-60		-55		-50		-45		-40		-35		-30	
		-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30
35000.	319.	0.	0.	0.	0.	0.	1.	34.	42.	17.	4.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
40000.	289.	0.	0.	0.	0.	8.	18.	20.	33.	20.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	258.	0.	0.	0.	2.	3.	14.	51.	28.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	225.	0.	0.	0.	0.	13.	56.	27.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	187.	0.	0.	0.	6.	36.	46.	10.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	171.	0.	0.	0.	5.	32.	52.	11.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	152.	0.	0.	0.	1.	14.	60.	24.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	127.	0.	0.	0.	0.	6.	39.	52.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	118.	0.	0.	0.	0.	2.	25.	59.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	108.	0.	0.	0.	0.	0.	14.	36.	48.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	105.	0.	0.	0.	0.	1.	4.	23.	64.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	98.	0.	0.	0.	0.	0.	2.	10.	50.	37.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95000.	91.	0.	0.	0.	0.	0.	0.	2.	25.	60.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100000.	69.	0.	0.	0.	0.	0.	0.	1.	3.	49.	38.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

MARCH

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		< -30	> -30	> -25	> -20	> -15	> -10	> -5	> 0	> 5	> 10	> 15	> 20	> 25	
4940.	388.	0.	0.	0.	0.	0.	2.	6.	15.	20.	29.	18.	9.	1.	
5000.	482.	0.	0.	0.	0.	0.	1.	6.	18.	24.	26.	17.	7.	1.	
6000.	483.	0.	0.	0.	0.	0.	2.	10.	22.	32.	23.	11.	1.	0.	
7000.	483.	0.	0.	0.	0.	0.	4.	15.	29.	31.	17.	4.	0.	0.	
8000.	482.	0.	0.	0.	0.	1.	8.	21.	34.	24.	12.	1.	0.	0.	
9000.	481.	0.	0.	0.	0.	3.	12.	29.	32.	20.	4.	0.	0.	0.	
10000.	480.	0.	0.	0.	1.	5.	19.	35.	28.	11.	0.	0.	0.	0.	
11000.	476.	0.	0.	0.	1.	10.	26.	33.	25.	5.	0.	0.	0.	0.	
12000.	475.	0.	0.	1.	4.	16.	31.	36.	13.	1.	0.	0.	0.	0.	
13000.	475.	0.	0.	2.	7.	21.	35.	29.	6.	0.	0.	0.	0.	0.	
14000.	473.	0.	0.	2.	13.	26.	40.	18.	1.	0.	0.	0.	0.	0.	
15000.	473.	0.	2.	4.	19.	28.	38.	8.	0.	0.	0.	0.	0.	0.	

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		< -55	> -55	> -50	> -45	> -40	> -35	> -30	> -25	> -20	> -15	> -10	> -5	> 0	
16000.	473.	0.	0.	0.	0.	0.	0.	2.	9.	24.	40.	22.	3.	0.	
18000.	472.	0.	0.	0.	0.	0.	2.	7.	21.	39.	27.	4.	0.	0.	
20000.	463.	0.	0.	0.	0.	2.	5.	18.	38.	29.	8.	0.	0.	0.	
25000.	416.	0.	0.	0.	6.	25.	45.	21.	4.	0.	0.	0.	0.	0.	
30000.	377.	0.	3.	36.	45.	15.	1.	0.	0.	0.	0.	0.	0.	0.	

TABLE IX (CONT)

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL ORS												
		<-85	>-85 <-80	>-80 <-75	>-75 <-70	>-70 <-65	>-65 <-60	>-60 <-55	>-55 <-50	>-50 <-45	>-45 <-40	>-40 <-35	>-35 <-30
35000.	313.	0.	0.	0.	0.	0.	1.	28.	50.	15.	4.	0.	0.
40000.	253.	0.	0.	0.	0.	2.	28.	26.	25.	18.	0.	0.	0.
45000.	232.	0.	0.	0.	0.	3.	16.	52.	27.	2.	0.	0.	0.
50000.	202.	0.	0.	0.	0.	5.	50.	38.	7.	0.	0.	0.	0.
55000.	169.	0.	0.	0.	2.	15.	53.	25.	5.	1.	0.	0.	0.
60000.	147.	0.	0.	0.	0.	11.	47.	41.	1.	0.	0.	0.	0.
65000.	131.	0.	0.	0.	0.	2.	50.	47.	2.	0.	0.	0.	0.
70000.	124.	0.	0.	0.	0.	0.	15.	76.	9.	0.	0.	0.	0.
75000.	113.	0.	0.	0.	0.	0.	5.	62.	31.	2.	0.	0.	0.
80000.	105.	0.	0.	0.	0.	0.	0.	31.	64.	5.	0.	0.	0.
85000.	100.	0.	0.	0.	0.	0.	0.	8.	73.	18.	1.	0.	0.
90000.	89.	0.	0.	0.	0.	0.	0.	1.	44.	48.	7.	0.	0.
95000.	81.	0.	0.	0.	0.	0.	0.	0.	14.	62.	17.	0.	0.
100000.	62.	0.	0.	0.	0.	0.	0.	0.	2.	37.	45.	11.	5.

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

APRIL

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL ORS																
		< -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10 < 15	> 15 < 20	> 20 < 25	> 25 < 30	> 30			
4940.	417.	0.	0.	0.	0.	0.	0.	3.	15.	27.	29.	24.	3.	0.			
5000.	534.	0.	0.	0.	0.	0.	0.	3.	15.	27.	30.	22.	3.	0.			
6000.	534.	0.	0.	0.	0.	0.	1.	7.	24.	37.	26.	6.	0.	0.			
7000.	533.	0.	0.	0.	0.	0.	2.	11.	34.	37.	15.	1.	0.	0.			
8000.	531.	0.	0.	0.	0.	1.	5.	18.	44.	28.	4.	0.	0.	0.			
9000.	533.	0.	0.	0.	0.	3.	9.	35.	41.	13.	0.	0.	0.	0.			
10000.	533.	0.	0.	0.	0.	5.	17.	45.	28.	4.	0.	0.	0.	0.			
11000.	533.	0.	0.	0.	2.	8.	31.	46.	12.	0.	0.	0.	0.	0.			
12000.	532.	0.	0.	0.	5.	13.	48.	30.	5.	0.	0.	0.	0.	0.			
13000.	532.	0.	0.	2.	6.	24.	55.	13.	0.	0.	0.	0.	0.	0.			
14000.	532.	0.	0.	3.	9.	46.	34.	7.	0.	0.	0.	0.	0.	0.			
15000.	532.	0.	1.	4.	19.	58.	17.	1.	0.	0.	0.	0.	0.	0.			

GEOMETRIC ALTITUDE MSL FEET	TOTAL ORS																
		< -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0			
16000.	531.	0.	0.	0.	0.	0.	0.	0.	3.	7.	38.	44.	8.	0.			
18000.	525.	0.	0.	0.	0.	0.	0.	2.	5.	28.	55.	10.	0.	0.			
20000.	501.	0.	0.	0.	0.	0.	2.	4.	20.	61.	13.	0.	0.	0.			
25000.	458.	0.	0.	0.	2.	6.	37.	50.	6.	0.	0.	0.	0.	0.			
30000.	431.	0.	0.	8.	55.	35.	1.	0.	0.	0.	0.	0.	0.	0.			

TABLE IX (CONT)

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	>-80		>-75		>-70		>-65		>-60		>-55		>-50		>-45		>-40		>-35		>-30		>-25	
		<-80	<-75	<-70	<-65	<-60	<-55	<-50	<-45	<-40	<-35	<-30	<-25	<-45	<-40	<-35	<-30	<-25	<-35	<-30	<-25	<-30	<-25		
35000.	333.	0.	0.	0.	0.	0.	0.	0.	0.	10.	59.	30.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
40000.	272.	0.	0.	0.	1.	33.	1.	1.	33.	34.	22.	10.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
45000.	244.	0.	0.	1.	6.	17.	6.	6.	17.	49.	27.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
50000.	222.	0.	0.	0.	7.	51.	7.	7.	51.	36.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
55000.	188.	0.	0.	2.	19.	54.	19.	19.	54.	24.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
60000.	169.	0.	0.	1.	18.	60.	18.	18.	60.	20.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
65000.	158.	0.	0.	0.	3.	46.	3.	3.	46.	49.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
70000.	146.	0.	0.	0.	0.	10.	0.	0.	10.	71.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
75000.	139.	0.	0.	0.	0.	2.	0.	0.	2.	35.	63.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	125.	0.	0.	0.	0.	0.	0.	0.	0.	9.	79.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
85000.	116.	0.	0.	0.	0.	0.	0.	0.	0.	0.	49.	48.	3.	0.	0.	0.	0.	3.	0.	0.	0.	0.	0.	0.	
90000.	110.	0.	0.	0.	0.	0.	0.	0.	0.	0.	14.	68.	18.	0.	0.	0.	0.	18.	0.	0.	0.	0.	0.	0.	
95000.	98.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	37.	55.	4.	0.	0.	0.	55.	4.	0.	0.	0.	0.	0.	
100000.	74.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	55.	34.	0.	0.	0.	55.	34.	1.	0.	0.	0.	0.	

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

MAY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		<-20	>-20	>-15	>-10	>-5	>0	>5	>10	>15	>20	>25	>30	>35	>35
4940.	413.	0.	0.	0.	0.	0.	0.	4.	11.	25.	31.	23.	5.	0.	
5000.	462.	0.	0.	0.	0.	0.	0.	4.	13.	28.	30.	22.	3.	0.	
6000.	462.	0.	0.	0.	0.	0.	0.	6.	23.	40.	26.	5.	0.	0.	
7000.	462.	0.	0.	0.	0.	0.	2.	11.	34.	39.	14.	0.	0.	0.	
8000.	462.	0.	0.	0.	0.	0.	5.	20.	43.	30.	2.	0.	0.	0.	
9000.	462.	0.	0.	0.	0.	1.	10.	31.	46.	13.	0.	0.	0.	0.	
10000.	462.	0.	0.	0.	1.	4.	19.	45.	30.	2.	0.	0.	0.	0.	
11000.	459.	0.	0.	0.	1.	8.	32.	48.	10.	0.	0.	0.	0.	0.	
12000.	457.	0.	0.	1.	2.	16.	49.	31.	1.	0.	0.	0.	0.	0.	
13000.	455.	0.	0.	1.	4.	34.	51.	9.	0.	0.	0.	0.	0.	0.	
14000.	453.	0.	1.	1.	13.	52.	33.	0.	0.	0.	0.	0.	0.	0.	
15000.	450.	0.	1.	3.	28.	57.	10.	0.	0.	0.	0.	0.	0.	0.	

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		<-50	>-50	>-45	>-40	>-35	>-30	>-25	>-20	>-15	>-10	>-5	>0	>5	>5
16000.	449.	0.	0.	0.	0.	0.	0.	0.	0.	8.	54.	36.	1.	0.	
18000.	445.	0.	0.	0.	0.	0.	0.	1.	6.	49.	43.	2.	0.	0.	
20000.	435.	0.	0.	0.	0.	0.	0.	4.	44.	49.	3.	0.	0.	0.	
25000.	419.	0.	0.	0.	1.	10.	52.	36.	1.	0.	0.	0.	0.	0.	
30000.	386.	0.	2.	21.	63.	14.	0.	0.	0.	0.	0.	0.	0.	0.	

TABLE IX (CONT)

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		<-80	-80 -<-75	-75 -<-70	-70 -<-65	-65 -<-60	-60 -<-55	-55 -<-50	-50 -<-45	-45 -<-40	-40 -<-35	-35 -<-30	-30 -<-25
35000.	307.	0.	0.	0.	0.	0.	1.	37.	58.	4.	0.	0.	0.
40000.	263.	0.	0.	0.	0.	23.	61.	16.	0.	0.	0.	0.	0.
45000.	248.	0.	0.	0.	8.	34.	47.	11.	0.	0.	0.	0.	0.
50000.	222.	0.	0.	1.	10.	54.	34.	0.	0.	0.	0.	0.	0.
55000.	181.	0.	0.	3.	25.	55.	15.	1.	0.	0.	0.	0.	0.
60000.	169.	0.	0.	1.	24.	65.	9.	0.	0.	0.	0.	0.	0.
65000.	151.	0.	0.	0.	1.	46.	53.	0.	0.	0.	0.	0.	0.
70000.	139.	0.	0.	0.	0.	1.	76.	23.	0.	0.	0.	0.	0.
75000.	129.	0.	0.	0.	0.	0.	19.	78.	0.	0.	0.	0.	0.
80000.	124.	0.	0.	0.	0.	0.	0.	63.	2.	0.	0.	0.	0.
85000.	119.	0.	0.	0.	0.	0.	0.	10.	37.	0.	0.	0.	0.
90000.	113.	0.	0.	0.	0.	0.	0.	0.	85.	5.	0.	0.	0.
95000.	97.	0.	0.	0.	0.	0.	0.	0.	52.	47.	1.	0.	0.
100000.	74.	0.	0.	0.	0.	0.	0.	0.	16.	68.	14.	0.	0.
									0.	46.	53.	1.	0.

TABLE IX (CONT.)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

		JUNE													
		TEMPERATURE DEGREES CELSIUS													
GEOMETRIC ALTITUDE MSL FEET	TOTAL OPS	> -15	> -10	> -5	> 0	> 5	> 10	> 15	> 20	> 25	> 30	> 35	> 40	> 40	
		< -15	< -10	< -5	< 0	< 5	< 10	< 15	< 20	< 25	< 30	< 35	< 40	< 40	
4940.	320.	0.	0.	0.	0.	0.	3.	16.	25.	34.	19.	3.	0.	0.	
5000.	351.	0.	0.	0.	0.	0.	3.	16.	27.	35.	17.	3.	0.	0.	
6000.	352.	0.	0.	0.	0.	0.	4.	30.	41.	22.	3.	0.	0.	0.	
7000.	351.	0.	0.	0.	0.	0.	11.	41.	39.	8.	0.	0.	0.	0.	
8000.	352.	0.	0.	0.	0.	2.	27.	47.	22.	2.	0.	0.	0.	0.	
9000.	351.	0.	0.	0.	0.	8.	42.	43.	7.	0.	0.	0.	0.	0.	
10000.	352.	0.	0.	0.	2.	20.	56.	20.	1.	0.	0.	0.	0.	0.	
11000.	349.	0.	0.	0.	6.	41.	46.	6.	0.	0.	0.	0.	0.	0.	
12000.	351.	0.	0.	2.	18.	62.	18.	0.	0.	0.	0.	0.	0.	0.	
13000.	349.	0.	0.	3.	41.	50.	5.	0.	0.	0.	0.	0.	0.	0.	
14000.	348.	0.	0.	14.	66.	19.	0.	0.	0.	0.	0.	0.	0.	0.	
15000.	346.	0.	1.	40.	55.	3.	0.	0.	0.	0.	0.	0.	0.	0.	
		> -45	> -40	> -35	> -30	> -25	> -20	> -15	> -10	> -5	> 0	> 5	> 10	> 10	
GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	< -40	< -35	< -30	< -25	< -20	< -15	< -10	< -5	< 0	< 5	< 10	< 10	
16000.	347.	0.	0.	0.	0.	0.	0.	0.	10.	70.	20.	0.	0.	0.	
18000.	344.	0.	0.	0.	0.	0.	0.	7.	65.	28.	0.	0.	0.	0.	
20000.	338.	0.	0.	0.	0.	0.	0.	56.	41.	1.	0.	0.	0.	0.	
25000.	317.	0.	0.	0.	0.	10.	58.	30.	0.	0.	0.	0.	0.	0.	
30000.	297.	0.	0.	25.	53.	16.	1.	0.	0.	0.	0.	0.	0.	0.	

TABLE IX (CONT)

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS																								
		< -80	> -80	< -75	> -75	< -70	> -70	< -65	> -65	< -60	> -60	< -55	> -55	< -50	> -50	< -45	> -45	< -40	> -40	< -35	> -35	< -30	> -30	< -25	> -25
35000.	247.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	3.	40.	49.	8.	49.	1.	8.	1.	0.	0.	0.	0.	0.
40000.	213.	0.	0.	0.	0.	0.	0.	2.	40.	53.	39.	54.	54.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
45000.	195.	0.	0.	0.	0.	4.	4.	53.	39.	195.	39.	4.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
50000.	185.	0.	0.	0.	0.	5.	5.	39.	8.	185.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
55000.	169.	0.	0.	0.	0.	11.	11.	33.	2.	169.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
60000.	156.	0.	0.	0.	0.	0.	0.	65.	8.	156.	8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65000.	137.	0.	0.	0.	0.	0.	0.	28.	71.	137.	71.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70000.	131.	0.	0.	0.	0.	0.	0.	0.	80.	131.	80.	19.	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75000.	126.	0.	0.	0.	0.	0.	0.	0.	2.	126.	2.	96.	96.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80000.	122.	0.	0.	0.	0.	0.	0.	0.	0.	122.	0.	49.	49.	50.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85000.	116.	0.	0.	0.	0.	0.	0.	0.	0.	116.	0.	2.	2.	90.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90000.	110.	0.	0.	0.	0.	0.	0.	0.	0.	110.	0.	1.	1.	37.	59.	3.	59.	0.	3.	0.	0.	0.	0.	0.	0.
95000.	97.	0.	0.	0.	0.	0.	0.	0.	0.	97.	0.	0.	0.	4.	79.	15.	79.	1.	15.	1.	0.	0.	0.	0.	
100000.	83.	0.	0.	0.	0.	0.	0.	0.	0.	83.	0.	0.	0.	0.	30.	64.	30.	5.	64.	5.	0.	0.	0.	0.	

TABLE IX (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

JULY

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10 < 15	> 15 < 20	> 20 < 25	> 25 < 30	> 30 < 35	> 35 < 40	> 40 < 45	> 45
4940.	320.	0.	0.	0.	0.	0.	0.	8.	35.	29.	22.	5.	0.	0.
5000.	350.	0.	0.	0.	0.	0.	0.	6.	35.	33.	20.	3.	0.	0.
6000.	350.	0.	0.	0.	0.	0.	0.	21.	48.	25.	5.	0.	0.	0.
7000.	350.	0.	0.	0.	0.	0.	1.	39.	49.	11.	0.	0.	0.	0.
8000.	351.	0.	0.	0.	0.	0.	10.	58.	28.	3.	0.	0.	0.	0.
9000.	351.	0.	0.	0.	0.	0.	28.	62.	11.	0.	0.	0.	0.	0.
10000.	351.	0.	0.	0.	0.	3.	59.	36.	2.	0.	0.	0.	0.	0.
11000.	354.	0.	0.	0.	1.	19.	70.	10.	0.	0.	0.	0.	0.	0.
12000.	354.	0.	0.	0.	2.	55.	42.	1.	0.	0.	0.	0.	0.	0.
13000.	354.	0.	0.	0.	7.	82.	10.	0.	0.	0.	0.	0.	0.	0.
14000.	354.	0.	0.	0.	52.	47.	1.	0.	0.	0.	0.	0.	0.	0.
15000.	353.	0.	0.	3.	87.	9.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10
16000.	352.	0.	0.	0.	0.	0.	0.	0.	0.	0.	34.	66.	0.	0.
18000.	350.	0.	0.	0.	0.	0.	0.	0.	13.	87.	1.	1.	0.	0.
20000.	345.	0.	0.	0.	0.	0.	0.	0.	90.	5.	5.	0.	0.	0.
25000.	317.	0.	0.	0.	0.	0.	4.	82.	14.	0.	0.	0.	0.	0.
30000.	297.	0.	0.	0.	9.	85.	5.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	>-80		>-75		>-70		>-65		>-60		>-55		>-50		>-45		>-40		>-35		>-30		>-25	
		<-80	<-75	<-70	<-65	<-60	<-55	<-50	<-45	<-40	<-35	<-30	<-25												
35000.	261.	0.	0.	0.	0.	0.	0.	0.	33.	67.	0.	0.	0.	0.	23.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
40000.	221.	0.	0.	0.	0.	0.	1.	76.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
45000.	196.	0.	0.	0.	0.	85.	15.	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
50000.	185.	0.	0.	36.	61.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
55000.	162.	0.	0.	36.	62.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
60000.	153.	0.	0.	1.	36.	61.	3.	0.	0.	0.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
65000.	141.	0.	0.	0.	0.	42.	58.	0.	0.	0.	58.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
70000.	135.	0.	0.	0.	0.	0.	72.	28.	0.	0.	72.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
75000.	129.	0.	0.	0.	0.	0.	9.	90.	0.	0.	9.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	127.	0.	0.	0.	0.	0.	0.	52.	0.	0.	0.	0.	0.	48.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
85000.	119.	0.	0.	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.	89.	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
90000.	113.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	1.	52.	46.	1.	0.	0.	0.	0.	0.	0.	0.	0.	
95000.	107.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	1.	11.	82.	6.	0.	0.	0.	0.	0.	0.	0.	0.	
100000.	97.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	47.	51.	1.	0.	0.	0.	0.	0.	0.	0.	

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

AUGUST

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		< -10	> -10	> -5	> 0	> 5	> 10	> 15	> 20	> 25	> 30	> 35	> 40
4940.	355.	0.	0.	0.	0.	0.	0.	15.	35.	30.	18.	1.	0.
5000.	384.	0.	0.	0.	0.	0.	1.	17.	38.	29.	15.	0.	0.
6000.	384.	0.	0.	0.	0.	0.	1.	31.	44.	22.	1.	0.	0.
7000.	385.	0.	0.	0.	0.	0.	4.	50.	38.	8.	0.	0.	0.
8000.	385.	0.	0.	0.	0.	0.	15.	62.	23.	0.	0.	0.	0.
9000.	385.	0.	0.	0.	0.	1.	42.	52.	5.	0.	0.	0.	0.
10000.	384.	0.	0.	0.	0.	11.	65.	23.	1.	0.	0.	0.	0.
11000.	384.	0.	0.	0.	1.	35.	62.	3.	0.	0.	0.	0.	0.
12000.	384.	0.	0.	0.	2.	72.	26.	0.	0.	0.	0.	0.	0.
13000.	385.	0.	0.	0.	25.	74.	1.	0.	0.	0.	0.	0.	0.
14000.	385.	0.	0.	1.	69.	30.	0.	0.	0.	0.	0.	0.	0.
15000.	384.	0.	0.	10.	88.	3.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		< -45	> -45	> -40	> -35	> -30	> -25	> -20	> -15	> -10	> -5	> 0	> 5
16000.	382.	0.	0.	0.	0.	0.	0.	0.	0.	0.	55.	45.	0.
18000.	378.	0.	0.	0.	0.	0.	0.	0.	0.	26.	73.	1.	0.
20000.	375.	0.	0.	0.	0.	0.	0.	0.	7.	90.	3.	0.	0.
25000.	358.	0.	0.	0.	0.	0.	8.	85.	8.	0.	0.	0.	0.
30000.	344.	0.	0.	0.	22.	75.	3.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

AUGUST

GEOMETRIC ALTITUDE MSL FEET	TOTAL ORS												
		<-80	>-80 <-75	>-75 <-70	>-70 <-65	>-65 <-60	>-60 <-55	>-55 <-50	>-50 <-45	>-45 <-40	>-40 <-35	>-35 <-30	>-30 <-25
35000.	308.	0.	0.	0.	0.	0.	0.	0.	0.	50.	49.	0.	0.
40000.	277.	0.	0.	0.	0.	0.	2.	76.	22.	0.	0.	0.	0.
45000.	242.	0.	0.	0.	2.	73.	26.	0.	0.	0.	0.	0.	0.
50000.	220.	0.	0.	26.	66.	8.	0.	0.	0.	0.	0.	0.	0.
55000.	195.	0.	1.	26.	65.	8.	0.	0.	0.	0.	0.	0.	0.
60000.	183.	0.	0.	0.	31.	68.	1.	0.	0.	0.	0.	0.	0.
65000.	175.	0.	0.	0.	0.	25.	75.	0.	0.	0.	0.	0.	0.
70000.	165.	0.	0.	0.	0.	0.	68.	32.	0.	0.	0.	0.	0.
75000.	158.	0.	0.	0.	0.	0.	9.	91.	0.	0.	0.	0.	0.
80000.	151.	0.	0.	0.	0.	0.	0.	68.	32.	0.	0.	0.	0.
85000.	147.	0.	0.	0.	0.	0.	0.	9.	90.	1.	0.	0.	0.
90000.	131.	0.	0.	0.	0.	0.	0.	9.	60.	39.	1.	0.	0.
95000.	118.	0.	0.	0.	0.	0.	0.	0.	15.	76.	8.	0.	0.
100000.	102.	0.	0.	0.	0.	0.	0.	0.	2.	65.	33.	0.	0.

TABLE IX (CONT)
RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
AT SELECTED LEVELS (IN PER CENT)
STALLION SITE
PERIOD OF RECORD 1961-1973

SEPTEMBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10 < 15	≥ 15 < 20	≥ 20 < 25	≥ 25 < 30	≥ 30 < 35	≥ 35 < 40	≥ 40
4940.	322.	0.	0.	0.	0.	0.	1.	8.	30.	30.	27.	3.	0.	0.
5000.	364.	0.	0.	0.	0.	0.	1.	9.	30.	32.	25.	2.	0.	0.
6000.	363.	0.	0.	0.	0.	0.	1.	14.	44.	37.	4.	0.	0.	0.
7000.	364.	0.	0.	0.	0.	0.	4.	22.	55.	18.	1.	0.	0.	0.
8000.	364.	0.	0.	0.	0.	1.	7.	46.	43.	3.	0.	0.	0.	0.
9000.	365.	0.	0.	0.	0.	4.	15.	63.	19.	0.	0.	0.	0.	0.
10000.	364.	0.	0.	0.	0.	7.	36.	54.	2.	0.	0.	0.	0.	0.
11000.	363.	0.	0.	0.	3.	10.	67.	20.	0.	0.	0.	0.	0.	0.
12000.	363.	0.	0.	0.	4.	29.	65.	2.	0.	0.	0.	0.	0.	0.
13000.	363.	0.	0.	1.	6.	62.	31.	0.	0.	0.	0.	0.	0.	0.
14000.	363.	0.	0.	3.	20.	74.	3.	0.	0.	0.	0.	0.	0.	0.
15000.	362.	0.	0.	4.	46.	49.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -45	≥ -45 < -40	≥ -40 < -35	≥ -35 < -30	≥ -30 < -25	≥ -25 < -20	≥ -20 < -15	≥ -15 < -10	≥ -10 < -5	≥ -5 < 0	≥ 0 < 5	≥ 5 < 10	≥ 10
16000.	362.	0.	0.	0.	0.	0.	0.	0.	1.	8.	77.	14.	0.	0.
18000.	361.	0.	0.	0.	0.	0.	0.	1.	4.	55.	40.	0.	0.	0.
20000.	359.	0.	0.	0.	0.	0.	1.	31.	65.	1.	1.	0.	0.	0.
25000.	346.	0.	0.	0.	1.	3.	47.	48.	1.	0.	0.	0.	0.	0.
30000.	326.	0.	1.	10.	53.	37.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -80		> -80 < -75		> -75 < -70		> -70 < -65		> -65 < -60		> -60 < -55		> -55 < -50		> -50 < -45		> -45 < -40		> -40 < -35		> -35 < -30		> -30 < -25	
		< -80	> -80 < -75	> -75 < -70	> -70 < -65	> -65 < -60	> -60 < -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25	> -25	> -20	> -15	> -10	> -5	> 0	> 5	> 10	> 15	> 20	> 25	
35000.	278.	0.	0.	0.	0.	0.	0.	0.	19.	58.	22.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
40000.	253.	0.	0.	0.	0.	0.	15.	67.	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
45000.	232.	0.	0.	0.	0.	69.	29.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
50000.	219.	0.	0.	22.	60.	16.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
55000.	196.	0.	1.	33.	53.	12.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
60000.	184.	0.	0.	0.	42.	53.	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
65000.	174.	0.	0.	0.	0.	51.	49.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
70000.	163.	0.	0.	0.	0.	4.	76.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
75000.	156.	0.	0.	0.	0.	0.	24.	73.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
80000.	150.	0.	0.	0.	0.	0.	0.	70.	30.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
85000.	142.	0.	0.	0.	0.	0.	0.	15.	83.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
90000.	131.	0.	0.	0.	0.	0.	0.	2.	78.	21.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
95000.	115.	0.	0.	0.	0.	0.	0.	0.	42.	58.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
100000.	102.	0.	0.	0.	0.	0.	0.	0.	10.	78.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

OCTOBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		<-20	>-20	>-15	>-10	>-5	>0	>5	>10	>15	>20	>25	>30	>35	>35
4940.	367.	0.	0.	0.	0.	0.	2.	11.	23.	29.	27.	8.	0.	0.	0.
5000.	417.	0.	0.	0.	0.	0.	2.	12.	23.	32.	24.	6.	0.	0.	0.
6000.	417.	0.	0.	0.	0.	0.	2.	10.	36.	39.	12.	0.	0.	0.	0.
7000.	416.	0.	0.	0.	0.	1.	4.	15.	46.	33.	2.	0.	0.	0.	0.
8000.	417.	0.	0.	0.	0.	1.	5.	26.	54.	14.	0.	0.	0.	0.	0.
9000.	418.	0.	0.	0.	1.	2.	8.	41.	46.	1.	0.	0.	0.	0.	0.
10000.	418.	0.	0.	0.	1.	4.	16.	58.	21.	0.	0.	0.	0.	0.	0.
11000.	418.	0.	0.	0.	1.	6.	33.	58.	2.	0.	0.	0.	0.	0.	0.
12000.	418.	0.	0.	1.	1.	8.	62.	28.	0.	0.	0.	0.	0.	0.	0.
13000.	418.	0.	0.	1.	2.	19.	72.	6.	0.	0.	0.	0.	0.	0.	0.
14000.	417.	0.	0.	1.	3.	47.	47.	1.	0.	0.	0.	0.	0.	0.	0.
15000.	416.	0.	1.	1.	13.	68.	17.	0.	0.	0.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS														
		<-45	>-45	>-40	>-35	>-30	>-25	>-20	>-15	>-10	>-5	>0	>5	>10	>10
16000.	414.	0.	0.	0.	0.	0.	0.	0.	1.	30.	64.	4.	0.	0.	0.
18000.	413.	0.	0.	0.	0.	0.	1.	1.	18.	70.	10.	0.	0.	0.	0.
20000.	410.	0.	0.	0.	0.	0.	1.	13.	67.	19.	0.	0.	0.	0.	0.
25000.	388.	0.	0.	0.	1.	29.	61.	9.	0.	0.	0.	0.	0.	0.	0.
30000.	362.	0.	6.	50.	41.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE IX (CONT)

OCTOBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	< -80	> -80 < -75	> -75 < -70	> -70 < -65	> -65 < -60	> -60 < -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25
35000.	314.	0.	0.	0.	0.	0.	0.	13.	57.	28.	3.	0.	0.
40000.	288.	0.	0.	0.	0.	6.	45.	45.	4.	0.	0.	0.	0.
45000.	255.	0.	0.	1.	9.	67.	22.	0.	0.	0.	0.	0.	0.
50000.	247.	0.	0.	9.	61.	29.	2.	0.	0.	0.	0.	0.	0.
55000.	219.	0.	0.	26.	58.	16.	0.	0.	0.	0.	0.	0.	0.
60000.	210.	0.	0.	2.	48.	48.	2.	0.	0.	0.	0.	0.	0.
65000.	201.	0.	0.	0.	4.	67.	28.	0.	0.	0.	0.	0.	0.
70000.	195.	0.	0.	0.	0.	16.	73.	11.	0.	0.	0.	0.	0.
75000.	185.	0.	0.	0.	0.	0.	50.	49.	1.	0.	0.	0.	0.
80000.	175.	0.	0.	0.	0.	0.	10.	82.	8.	0.	0.	0.	0.
85000.	165.	0.	0.	0.	0.	0.	0.	57.	43.	0.	0.	0.	0.
90000.	152.	0.	0.	0.	0.	0.	0.	24.	72.	3.	0.	0.	0.
95000.	134.	0.	0.	0.	0.	0.	0.	7.	72.	20.	0.	0.	0.
100000.	115.	0.	0.	0.	0.	0.	0.	2.	47.	51.	0.	0.	0.

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE DEGREES CELSIUS											
		< -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10 < 15	> 15 < 20	> 20 < 25	> 25 < 30
4940.	348.	0.	0.	0.	0.	0.	2.	16.	22.	31.	22.	6.	0.
5000.	408.	0.	0.	0.	0.	0.	1.	17.	26.	28.	24.	4.	0.
6000.	407.	0.	0.	0.	0.	0.	5.	16.	37.	30.	12.	0.	0.
7000.	407.	0.	0.	0.	0.	0.	9.	22.	35.	30.	3.	0.	0.
8000.	408.	0.	0.	0.	0.	3.	11.	29.	40.	18.	0.	0.	0.
9000.	407.	0.	0.	0.	0.	5.	15.	30.	41.	9.	0.	0.	0.
10000.	407.	0.	0.	0.	0.	9.	19.	40.	29.	3.	0.	0.	0.
11000.	407.	0.	0.	0.	1.	12.	25.	44.	18.	0.	0.	0.	0.
12000.	404.	0.	0.	0.	4.	16.	31.	42.	7.	0.	0.	0.	0.
13000.	403.	0.	0.	0.	7.	17.	43.	31.	1.	0.	0.	0.	0.
14000.	403.	0.	0.	1.	11.	26.	45.	16.	0.	0.	0.	0.	0.
15000.	402.	0.	0.	5.	12.	37.	42.	4.	0.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	TEMPERATURE DEGREES CELSIUS											
		< -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0
16000.	402.	0.	0.	0.	0.	0.	0.	0.	1.	7.	21.	45.	27.
18000.	401.	0.	0.	0.	0.	0.	0.	0.	6.	13.	46.	33.	1.
20000.	390.	0.	0.	0.	0.	0.	0.	5.	10.	47.	35.	3.	0.
25000.	345.	0.	0.	0.	0.	5.	17.	49.	27.	2.	0.	0.	0.
30000.	322.	0.	0.	2.	30.	48.	18.	1.	0.	0.	0.	0.	0.

TABLE IX (CONT)

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		< -85	> -85 -80	> -80 -75	> -75 -70	> -70 -65	> -65 -60	> -60 -55	> -55 -50	> -50 -45	> -45 -40	> -40 -35	> -35 -30
35000.	293.	0.	0.	0.	0.	0.	3.	32.	53.	12.	0.	0.	0.
40000.	233.	0.	0.	0.	1.	18.	51.	25.	5.	0.	0.	0.	0.
45000.	210.	0.	0.	1.	19.	46.	28.	6.	0.	0.	0.	0.	0.
50000.	193.	0.	0.	6.	47.	39.	6.	1.	0.	0.	0.	0.	0.
55000.	164.	0.	1.	20.	48.	27.	5.	0.	0.	0.	0.	0.	0.
60000.	152.	0.	0.	7.	37.	44.	12.	1.	0.	0.	0.	0.	0.
65000.	148.	0.	0.	0.	12.	67.	21.	0.	0.	0.	0.	0.	0.
70000.	143.	0.	0.	0.	1.	47.	50.	2.	0.	0.	0.	0.	0.
75000.	134.	0.	0.	0.	0.	12.	75.	13.	0.	0.	0.	0.	0.
80000.	130.	0.	0.	0.	0.	2.	52.	43.	4.	0.	0.	0.	0.
85000.	123.	0.	0.	0.	0.	0.	27.	58.	15.	1.	0.	0.	0.
90000.	113.	0.	0.	0.	0.	0.	4.	55.	32.	8.	1.	0.	0.
95000.	94.	0.	0.	0.	0.	0.	0.	29.	50.	20.	1.	0.	0.
100000.	74.	0.	0.	0.	0.	0.	1.	9.	54.	28.	5.	1.	0.

TABLE IX (CONT)
 RELATIVE FREQUENCY DISTRIBUTION OF UPPER AIR TEMPERATURES
 AT SELECTED LEVELS (IN PER CENT)
 STALLION SITE
 PERIOD OF RECORD 1961-1973

DECEMBER

TEMPERATURE DEGREES CELSIUS

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		< -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5	> -5 < 0	> 0 < 5	> 5 < 10	> 10 < 15	> 15 < 20	> 20 < 25
4940.	297.	0.	0.	0.	0.	0.	5.	18.	25.	26.	23.	4.	0.
5000.	328.	0.	0.	0.	0.	0.	5.	16.	28.	26.	22.	2.	0.
6000.	329.	0.	0.	0.	0.	0.	1.	19.	33.	39.	7.	0.	0.
7000.	329.	0.	0.	0.	0.	0.	3.	26.	33.	33.	4.	0.	0.
8000.	329.	0.	0.	0.	0.	0.	10.	23.	39.	26.	2.	0.	0.
9000.	329.	0.	0.	0.	0.	0.	15.	27.	39.	19.	1.	0.	0.
10000.	329.	0.	0.	0.	0.	2.	22.	31.	36.	10.	0.	0.	0.
11000.	329.	0.	0.	0.	0.	7.	26.	33.	31.	4.	0.	0.	0.
12000.	329.	0.	0.	0.	0.	14.	26.	34.	25.	1.	0.	0.	0.
13000.	329.	0.	0.	0.	2.	21.	27.	40.	10.	0.	0.	0.	0.
14000.	329.	0.	0.	0.	7.	19.	34.	36.	3.	0.	0.	0.	0.
15000.	328.	0.	0.	1.	14.	24.	38.	22.	1.	0.	0.	0.	0.

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS												
		< -60	> -60 < -55	> -55 < -50	> -50 < -45	> -45 < -40	> -40 < -35	> -35 < -30	> -30 < -25	> -25 < -20	> -20 < -15	> -15 < -10	> -10 < -5
16000.	328.	0.	0.	0.	0.	0.	0.	0.	0.	4.	18.	27.	6.
18000.	326.	0.	0.	0.	0.	0.	0.	0.	2.	16.	26.	45.	0.
20000.	321.	0.	0.	0.	0.	0.	0.	2.	12.	24.	48.	11.	0.
25000.	305.	0.	0.	0.	0.	1.	17.	32.	44.	6.	0.	0.	0.
30000.	273.	0.	0.	0.	23.	45.	30.	2.	0.	0.	0.	0.	0.

TABLE IX (CONT)

DECEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBS	>-80 <-80	>-75 <-75	>-70 <-70	>-65 <-65	>-60 <-60	>-55 <-55	>-50 <-50	>-45 <-45	>-40 <-40	>-35 <-35	>-30 <-30	>-25
35000.	242.	0.	0.	0.	0.	12.	62.	22.	3.	0.	0.	0.	0.
40000.	216.	0.	0.	5.	20.	39.	27.	8.	0.	0.	0.	0.	0.
45000.	187.	0.	0.	6.	39.	45.	10.	0.	0.	0.	0.	0.	0.
50000.	175.	0.	0.	25.	57.	18.	1.	0.	0.	0.	0.	0.	0.
55000.	153.	0.	0.	41.	39.	12.	2.	0.	0.	0.	0.	0.	0.
60000.	149.	0.	0.	40.	44.	13.	0.	0.	0.	0.	0.	0.	0.
65000.	146.	0.	0.	19.	66.	13.	1.	0.	0.	0.	0.	0.	0.
70000.	138.	0.	0.	2.	51.	43.	4.	0.	0.	0.	0.	0.	0.
75000.	136.	0.	0.	0.	35.	54.	11.	0.	0.	0.	0.	0.	0.
80000.	132.	0.	0.	0.	9.	62.	29.	0.	0.	0.	0.	0.	0.
85000.	126.	0.	0.	0.	6.	40.	47.	6.	0.	0.	0.	0.	0.
90000.	120.	0.	0.	0.	1.	29.	52.	16.	3.	0.	0.	0.	0.
95000.	113.	0.	0.	0.	0.	18.	41.	32.	8.	1.	0.	0.	0.
100000.	92.	0.	0.	0.	0.	4.	32.	41.	22.	0.	1.	0.	0.

TABLE X
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	WINTER			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	1013.	25.	6.	-22.
5000.	1218.	24.	6.	-21.
6000.	1220.	21.	4.	-17.
7000.	1219.	18.	3.	-17.
8000.	1216.	15.	2.	-19.
9000.	1217.	12.	0.	-20.
10000.	1216.	10.	-2.	-20.
11000.	1217.	9.	-3.	-21.
12000.	1216.	6.	-5.	-23.
13000.	1215.	5.	-7.	-25.
14000.	1213.	3.	-8.	-27.
15000.	1208.	1.	-10.	-29.
16000.	1208.	0.	-12.	-31.
18000.	1199.	-5.	-16.	-36.
20000.	1165.	-9.	-21.	-40.
25000.	1074.	-21.	-32.	-47.
30000.	982.	-32.	-43.	-54.
35000.	859.	-33.	-53.	-61.
40000.	779.	-42.	-57.	-69.
45000.	693.	-48.	-58.	-76.
50000.	613.	-52.	-62.	-73.
55000.	519.	-52.	-65.	-78.
60000.	484.	-54.	-64.	-79.
65000.	451.	-53.	-63.	-75.
70000.	411.	-51.	-60.	-69.
75000.	391.	-50.	-58.	-69.
80000.	361.	-47.	-56.	-65.
85000.	346.	-46.	-54.	-66.
90000.	320.	-42.	-52.	-64.
95000.	301.	-39.	-50.	-60.
100000.	236.	-32.	-47.	-59.

TABLE X (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	SPRING			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	1218.	33.	16.	-9.
5000.	1478.	33.	15.	-9.
6000.	1479.	30.	12.	-9.
7000.	1478.	26.	10.	-11.
8000.	1475.	23.	7.	-13.
9000.	1476.	20.	5.	-16.
10000.	1475.	16.	3.	-17.
11000.	1468.	14.	1.	-19.
12000.	1464.	10.	-2.	-22.
13000.	1462.	7.	-4.	-24.
14000.	1458.	5.	-6.	-27.
15000.	1455.	4.	-8.	-29.
16000.	1453.	1.	-10.	-30.
18000.	1442.	-4.	-15.	-35.
20000.	1399.	-9.	-19.	-39.
25000.	1293.	-19.	-30.	-45.
30000.	1194.	-31.	-41.	-54.
35000.	953.	-40.	-51.	-61.
40000.	788.	-43.	-57.	-68.
45000.	724.	-48.	-58.	-72.
50000.	646.	-49.	-61.	-71.
55000.	538.	-49.	-63.	-74.
60000.	485.	-52.	-62.	-73.
65000.	440.	-54.	-60.	-69.
70000.	409.	-52.	-57.	-64.
75000.	381.	-50.	-55.	-63.
80000.	354.	-47.	-52.	-60.
85000.	335.	-42.	-50.	-58.
90000.	312.	-40.	-47.	-56.
95000.	276.	-35.	-44.	-54.
100000.	210.	-32.	-42.	-51.

TABLE X (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	SUMMER			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	995.	38.	25.	12.
5000.	1085.	38.	25.	12.
6000.	1086.	34.	22.	13.
7000.	1086.	30.	20.	10.
8000.	1088.	27.	18.	8.
9000.	1087.	24.	15.	6.
10000.	1087.	21.	13.	3.
11000.	1087.	18.	11.	0.
12000.	1089.	16.	8.	-3.
13000.	1088.	13.	6.	-5.
14000.	1087.	10.	4.	-6.
15000.	1083.	8.	2.	-8.
16000.	1081.	5.	-1.	-9.
18000.	1072.	2.	-5.	-13.
20000.	1058.	-3.	-9.	-17.
25000.	992.	-10.	-19.	-28.
30000.	938.	-22.	-30.	-40.
35000.	816.	-34.	-41.	-51.
40000.	711.	-45.	-52.	-63.
45000.	633.	-53.	-61.	-68.
50000.	590.	-58.	-68.	-74.
55000.	526.	-58.	-68.	-76.
60000.	492.	-58.	-64.	-71.
65000.	453.	-55.	-60.	-65.
70000.	431.	-51.	-56.	-60.
75000.	413.	-49.	-53.	-57.
80000.	400.	-45.	-50.	-55.
85000.	382.	-42.	-48.	-52.
90000.	354.	-36.	-45.	-51.
95000.	322.	-35.	-43.	-51.
100000.	282.	-31.	-40.	-48.

TABLE X (CONT)
 MEAN AND EXTREME UPPER AIR TEMPERATURES (DEGREES CELSIUS)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
4940.	1037.	33.	16.	-3.
5000.	1189.	33.	16.	-3.
6000.	1187.	29.	14.	-5.
7000.	1187.	26.	12.	-6.
8000.	1189.	23.	10.	-8.
9000.	1190.	20.	8.	-10.
10000.	1189.	17.	6.	-12.
11000.	1188.	14.	4.	-13.
12000.	1185.	11.	2.	-15.
13000.	1184.	9.	1.	-16.
14000.	1183.	7.	-1.	-18.
15000.	1180.	5.	-3.	-20.
16000.	1178.	3.	-5.	-21.
17000.	1175.	0.	-9.	-25.
18000.	1159.	-4.	-13.	-29.
20000.	1079.	-15.	-24.	-40.
25000.	1010.	-25.	-35.	-47.
30000.	885.	-37.	-46.	-59.
35000.	774.	-47.	-55.	-66.
40000.	697.	-50.	-62.	-71.
45000.	659.	-53.	-67.	-77.
50000.	579.	-57.	-68.	-78.
55000.	546.	-55.	-65.	-73.
60000.	523.	-54.	-61.	-70.
65000.	501.	-51.	-58.	-66.
70000.	475.	-49.	-56.	-62.
75000.	455.	-47.	-53.	-61.
80000.	430.	-44.	-51.	-59.
85000.	396.	-38.	-48.	-58.
90000.	343.	-40.	-47.	-55.
95000.	291.	-33.	-44.	-56.
100000.				

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR PRESSURE DATA

By Months

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Table XII. Mean and Extreme Upper Air
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TABLE XI
MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JANUARY		
		MAXIMUM	MEAN	MINIMUM
4440.	350.	863.	851.	835.
5000.	418.	862.	848.	833.
6000.	419.	829.	817.	803.
7000.	419.	798.	787.	773.
8000.	419.	769.	758.	743.
9000.	420.	741.	730.	715.
10000.	420.	714.	703.	688.
11000.	421.	687.	676.	661.
12000.	421.	662.	651.	635.
13000.	421.	637.	626.	610.
14000.	420.	613.	602.	586.
15000.	418.	590.	579.	563.
16000.	417.	567.	556.	540.
18000.	412.	524.	513.	496.
20000.	395.	484.	473.	455.
25000.	362.	395.	383.	364.
30000.	338.	319.	307.	290.
35000.	300.	255.	244.	230.
40000.	276.	202.	192.	182.
45000.	248.	158.	151.	143.
50000.	213.	123.	119.	112.
55000.	179.	96.	93.	87.
60000.	164.	75.	72.	68.
65000.	154.	58.	56.	53.
70000.	146.	45.5	44.0	41.5
75000.	139.	36.0	34.5	32.5
80000.	124.	28.5	27.5	25.5
85000.	117.	22.5	21.5	21.0
90000.	103.	17.7	17.1	16.3
95000.	97.	14.1	13.5	12.8
100000.	75.	11.3	10.8	10.2

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIHARS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FEBRUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	366.	862.	849.	836.
5000.	474.	860.	847.	833.
6000.	474.	828.	816.	803.
7000.	474.	798.	786.	773.
8000.	471.	768.	757.	744.
9000.	471.	739.	729.	715.
10000.	471.	713.	702.	688.
11000.	469.	687.	675.	661.
12000.	468.	661.	649.	635.
13000.	468.	637.	625.	610.
14000.	466.	613.	601.	585.
15000.	464.	590.	577.	562.
16000.	466.	568.	555.	539.
18000.	463.	525.	512.	494.
20000.	451.	485.	471.	452.
25000.	410.	396.	382.	362.
30000.	371.	320.	306.	288.
35000.	320.	256.	243.	229.
40000.	289.	204.	191.	181.
45000.	258.	160.	151.	144.
50000.	226.	125.	118.	114.
55000.	187.	98.	93.	90.
60000.	171.	76.	72.	70.
65000.	154.	59.	56.	55.
70000.	128.	46.5	44.5	42.5
75000.	119.	36.5	35.0	33.0
80000.	109.	28.5	27.5	26.0
85000.	106.	22.5	21.5	20.5
90000.	99.	18.1	17.1	16.2
95000.	93.	14.3	13.6	12.8
100000.	71.	11.4	10.9	10.3

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIMARS)
 AT SELECTED LEVELS BY MONTHS
 STATION, SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH		
		MAXIMUM	MEAN	MINIMUM
4940.	389.	860.	847.	835.
5000.	484.	858.	845.	832.
6000.	485.	827.	815.	800.
7000.	485.	798.	785.	770.
8000.	484.	769.	756.	740.
9000.	483.	742.	728.	712.
10000.	482.	715.	701.	685.
11000.	479.	688.	674.	658.
12000.	479.	663.	649.	631.
13000.	479.	638.	624.	606.
14000.	477.	614.	600.	581.
15000.	476.	591.	577.	558.
16000.	476.	568.	554.	534.
18000.	474.	526.	511.	491.
20000.	465.	485.	471.	450.
25000.	418.	396.	381.	359.
30000.	378.	320.	305.	286.
35000.	313.	256.	243.	228.
40000.	253.	202.	191.	181.
45000.	232.	158.	151.	144.
50000.	202.	123.	118.	113.
55000.	168.	96.	93.	89.
60000.	147.	76.	73.	69.
65000.	130.	61.	57.	54.
70000.	123.	48.0	44.5	42.5
75000.	112.	38.0	35.0	33.5
80000.	104.	30.0	28.0	26.5
85000.	99.	23.5	22.0	21.0
90000.	88.	18.6	17.4	16.5
95000.	81.	14.8	13.9	13.1
100000.	62.	11.8	11.1	10.4

TABLE XI (CONT)
 UPPER AND EXPOSED UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973
 APRIL

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	416.	862.	849.	825.
5000.	533.	860.	840.	823.
6000.	534.	828.	816.	794.
7000.	532.	798.	787.	765.
8000.	531.	769.	758.	738.
9000.	532.	741.	731.	710.
10000.	533.	714.	704.	684.
11000.	532.	688.	678.	658.
12000.	532.	663.	652.	633.
13000.	531.	638.	628.	609.
14000.	532.	615.	604.	586.
15000.	532.	592.	581.	563.
16000.	531.	569.	558.	541.
18000.	525.	527.	516.	497.
20000.	501.	486.	475.	456.
25000.	458.	396.	386.	367.
30000.	432.	320.	310.	294.
35000.	336.	256.	247.	234.
40000.	275.	202.	194.	186.
45000.	244.	160.	153.	147.
50000.	222.	125.	120.	115.
55000.	188.	97.	94.	90.
60000.	169.	75.	73.	70.
65000.	158.	59.	57.	55.
70000.	146.	46.5	45.0	43.0
75000.	139.	36.5	35.5	34.0
80000.	125.	29.0	28.0	27.0
85000.	116.	23.0	22.5	21.0
90000.	110.	18.4	17.7	16.6
95000.	98.	14.7	14.2	13.4
100000.	75.	11.7	11.3	10.7

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SIFE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MAY	
			MEAN	MINIMUM
4940.	412.	861.	849.	838.
5000.	461.	859.	847.	837.
6000.	462.	828.	817.	807.
7000.	461.	797.	788.	778.
8000.	462.	769.	760.	750.
9000.	461.	741.	733.	722.
10000.	462.	715.	707.	695.
11000.	458.	689.	681.	669.
12000.	457.	663.	656.	644.
13000.	454.	639.	631.	619.
14000.	453.	615.	608.	595.
15000.	450.	592.	585.	572.
16000.	449.	570.	563.	549.
18000.	445.	528.	520.	505.
20000.	435.	488.	480.	465.
25000.	419.	399.	391.	376.
30000.	386.	323.	315.	301.
35000.	309.	258.	252.	240.
40000.	265.	205.	198.	191.
45000.	250.	161.	156.	149.
50000.	224.	127.	122.	116.
55000.	183.	100.	95.	91.
60000.	170.	78.	75.	71.
65000.	151.	60.	58.	56.
70000.	139.	47.0	46.0	45.0
75000.	130.	37.0	36.0	35.5
80000.	128.	29.5	28.5	28.0
85000.	119.	23.5	23.0	22.0
90000.	113.	18.7	18.1	17.6
95000.	97.	15.0	14.5	14.0
100000.	74.	12.0	11.6	11.2

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIHARS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
4940.	320.	860.	849.	838.
5000.	351.	858.	847.	836.
6000.	352.	828.	818.	808.
7000.	351.	799.	789.	780.
8000.	352.	771.	762.	752.
9000.	351.	743.	735.	725.
10000.	352.	717.	709.	699.
11000.	349.	691.	683.	673.
12000.	351.	666.	659.	647.
13000.	349.	642.	635.	623.
14000.	348.	618.	611.	599.
15000.	346.	596.	589.	576.
16000.	347.	574.	567.	554.
18000.	344.	532.	525.	512.
20000.	338.	492.	485.	473.
25000.	317.	403.	396.	385.
30000.	297.	330.	321.	306.
35000.	247.	267.	257.	250.
40000.	213.	214.	204.	197.
45000.	196.	169.	160.	155.
50000.	185.	133.	125.	122.
55000.	169.	103.	98.	95.
60000.	156.	80.	76.	74.
65000.	137.	63.	60.	58.
70000.	131.	49.5	47.0	45.5
75000.	126.	39.0	37.0	36.0
80000.	122.	31.0	29.5	28.5
85000.	116.	24.5	23.5	22.5
90000.	110.	19.7	18.5	17.8
95000.	97.	15.8	14.9	14.1
100000.	83.	12.7	11.9	11.3

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIHARS)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JULY		
		MAXIMUM	MEAN	MINIMUM
4940.	321.	859.	852.	842.
5000.	350.	857.	850.	840.
6000.	350.	827.	821.	812.
7000.	350.	798.	793.	785.
8000.	351.	770.	765.	758.
9000.	351.	742.	738.	732.
10000.	351.	716.	712.	707.
11000.	354.	691.	687.	681.
12000.	354.	666.	662.	657.
13000.	354.	643.	638.	633.
14000.	354.	619.	615.	610.
15000.	353.	597.	592.	587.
16000.	352.	575.	571.	565.
16000.	350.	533.	529.	523.
20000.	345.	494.	489.	484.
25000.	317.	406.	401.	396.
30000.	299.	331.	326.	321.
35000.	263.	267.	263.	258.
40000.	221.	213.	209.	205.
45000.	197.	168.	164.	162.
50000.	185.	131.	128.	126.
55000.	162.	102.	99.	98.
60000.	153.	79.	77.	76.
65000.	141.	62.	61.	59.
70000.	135.	48.5	47.5	46.0
75000.	129.	38.5	37.5	36.5
80000.	127.	30.5	30.0	28.5
85000.	119.	24.0	23.5	23.0
90000.	113.	19.3	18.8	18.1
95000.	107.	15.4	15.0	14.4
100000.	97.	12.3	12.0	11.5

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIHARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST		
		MAXIMUM	MEAN	MINIMUM
4940.	356.	858.	852.	842.
5000.	384.	857.	850.	840.
6000.	384.	827.	821.	812.
7000.	385.	798.	792.	784.
8000.	385.	770.	765.	756.
9000.	385.	743.	738.	729.
10000.	384.	717.	712.	703.
11000.	384.	692.	686.	678.
12000.	384.	667.	662.	653.
13000.	385.	643.	638.	629.
14000.	385.	620.	614.	603.
15000.	384.	597.	592.	580.
16000.	382.	575.	570.	559.
18000.	378.	533.	528.	518.
20000.	375.	494.	488.	479.
25000.	359.	406.	400.	392.
30000.	345.	331.	325.	318.
35000.	308.	267.	262.	255.
40000.	277.	213.	208.	202.
45000.	242.	168.	164.	159.
50000.	220.	130.	128.	124.
55000.	195.	101.	99.	97.
60000.	184.	79.	77.	75.
65000.	176.	62.	60.	59.
70000.	165.	49.0	47.5	46.0
75000.	158.	38.5	37.5	36.5
80000.	151.	30.5	29.5	29.0
85000.	147.	24.5	23.5	23.0
90000.	131.	19.5	18.8	18.1
95000.	118.	15.6	15.0	14.4
100000.	102.	12.5	12.0	11.5

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973
 SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	323.	859.	850.	840.
5000.	365.	857.	849.	838.
6000.	364.	828.	819.	809.
7000.	365.	799.	790.	781.
8000.	365.	770.	763.	753.
9000.	366.	743.	735.	726.
10000.	365.	716.	709.	699.
11000.	364.	691.	684.	673.
12000.	364.	666.	659.	648.
13000.	364.	642.	635.	624.
14000.	364.	619.	611.	600.
15000.	363.	596.	588.	577.
16000.	363.	574.	566.	555.
18000.	362.	532.	524.	512.
20000.	360.	492.	485.	472.
25000.	340.	403.	397.	384.
30000.	326.	327.	321.	309.
35000.	276.	264.	258.	246.
40000.	253.	210.	205.	196.
45000.	233.	166.	161.	155.
50000.	220.	129.	126.	122.
55000.	197.	100.	98.	95.
60000.	184.	78.	76.	73.
65000.	174.	61.	59.	57.
70000.	163.	48.0	47.0	44.5
75000.	156.	38.0	37.0	36.0
80000.	150.	30.0	29.0	28.5
85000.	142.	24.0	23.0	22.5
90000.	131.	19.0	18.4	17.9
95000.	115.	15.1	14.7	14.3
100000.	102.	12.1	11.7	11.4

TABLE XI (CONT)
MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	OCTOBER	
			MEAN	MINIMUM
4940.	367.	862.	852.	838.
5000.	417.	860.	850.	836.
6000.	417.	829.	820.	807.
7000.	410.	800.	790.	778.
8000.	417.	771.	762.	750.
9000.	418.	744.	735.	723.
10000.	418.	718.	708.	695.
11000.	418.	692.	682.	668.
12000.	418.	667.	657.	642.
13000.	418.	643.	633.	617.
14000.	417.	619.	609.	593.
15000.	416.	596.	587.	570.
16000.	414.	574.	564.	547.
17000.	413.	531.	522.	504.
20000.	410.	491.	482.	464.
25000.	384.	402.	394.	374.
30000.	363.	327.	318.	301.
35000.	315.	263.	254.	241.
40000.	288.	209.	201.	192.
45000.	256.	164.	158.	153.
50000.	248.	128.	123.	119.
55000.	221.	100.	96.	93.
60000.	213.	77.	75.	73.
65000.	202.	60.	58.	57.
70000.	190.	47.0	46.0	44.5
75000.	186.	37.0	36.0	35.0
80000.	176.	29.5	28.5	27.5
85000.	166.	23.5	22.5	22.0
90000.	153.	18.6	17.9	17.4
95000.	135.	14.7	14.3	13.8
100000.	116.	11.8	11.4	10.9

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

NOVEMBER

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	348.	865.	851.	835.
5000.	408.	863.	849.	833.
6000.	407.	831.	818.	802.
7000.	407.	799.	789.	773.
8000.	408.	769.	760.	744.
9000.	407.	741.	732.	716.
10000.	407.	714.	705.	689.
11000.	408.	688.	679.	662.
12000.	405.	663.	653.	637.
13000.	404.	639.	629.	612.
14000.	404.	615.	605.	588.
15000.	403.	593.	582.	565.
16000.	403.	570.	560.	542.
18000.	402.	529.	517.	499.
20000.	392.	489.	477.	459.
25000.	345.	402.	368.	371.
30000.	321.	326.	313.	298.
35000.	293.	263.	250.	236.
40000.	233.	209.	197.	187.
45000.	209.	164.	155.	148.
50000.	192.	129.	121.	116.
55000.	163.	97.	94.	91.
60000.	151.	75.	73.	71.
65000.	147.	58.	57.	55.
70000.	142.	46.0	45.0	43.0
75000.	134.	36.0	35.5	34.0
80000.	130.	28.5	28.0	26.5
85000.	123.	22.5	22.0	21.0
90000.	113.	17.9	17.4	16.6
95000.	94.	14.3	13.8	13.2
100000.	74.	11.4	11.0	10.5

TABLE XI (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	297.	863.	849.	836.
5000.	328.	861.	848.	834.
6000.	329.	829.	817.	804.
7000.	329.	798.	787.	774.
8000.	329.	768.	757.	745.
9000.	329.	739.	729.	716.
10000.	329.	712.	702.	689.
11000.	329.	686.	676.	662.
12000.	329.	660.	650.	636.
13000.	329.	636.	625.	611.
14000.	329.	612.	601.	586.
15000.	328.	589.	578.	563.
16000.	328.	567.	556.	540.
16000.	320.	524.	513.	497.
20000.	321.	484.	473.	457.
25000.	305.	396.	384.	367.
30000.	274.	320.	308.	294.
35000.	243.	256.	245.	234.
40000.	216.	203.	193.	185.
45000.	148.	159.	152.	146.
50000.	176.	124.	119.	115.
55000.	154.	97.	93.	89.
60000.	151.	75.	72.	70.
65000.	146.	58.	57.	55.
70000.	138.	45.5	44.5	43.5
75000.	136.	35.5	34.5	34.0
80000.	132.	28.0	27.5	26.5
85000.	126.	22.5	21.5	21.0
90000.	121.	17.7	17.0	16.3
95000.	114.	14.0	13.5	12.8
100000.	92.	11.2	10.7	10.0

TABLE XII
MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
AT SELECTED LEVELS BY SEASONS
STATION SITE
PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	1013.	863.	850.	835.
5000.	1220.	862.	848.	833.
6000.	1222.	829.	817.	803.
7000.	1222.	798.	787.	773.
8000.	1219.	769.	758.	743.
9000.	1220.	741.	729.	715.
10000.	1220.	714.	702.	688.
11000.	1219.	687.	676.	661.
12000.	1218.	662.	650.	635.
13000.	1218.	637.	625.	610.
14000.	1215.	613.	601.	585.
15000.	1210.	590.	578.	562.
16000.	1211.	568.	556.	539.
18000.	1201.	525.	513.	494.
20000.	1167.	485.	472.	452.
25000.	1077.	396.	383.	362.
30000.	983.	320.	307.	288.
35000.	863.	256.	244.	229.
40000.	781.	204.	192.	181.
45000.	694.	160.	151.	143.
50000.	615.	125.	119.	112.
55000.	520.	98.	93.	87.
60000.	486.	76.	72.	68.
65000.	454.	59.	56.	53.
70000.	412.	46.5	44.0	41.5
75000.	394.	36.5	34.5	32.5
80000.	365.	28.5	27.5	25.5
85000.	349.	22.5	21.5	20.5
90000.	323.	18.1	17.1	16.2
95000.	304.	14.3	13.5	12.8
100000.	232.	11.4	10.8	10.0

TABLE XII (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY SEASONS
 STATION SIFF
 PERIOD OF RECORD 1961-1973

GEO-METRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SPRING		
		MAXIMUM	MEAN	MINIMUM
4940.	1217.	862.	848.	825.
5000.	1478.	860.	846.	823.
6000.	1481.	828.	816.	794.
7000.	1478.	798.	787.	765.
8000.	1477.	769.	758.	738.
9000.	1476.	742.	731.	710.
10000.	1477.	715.	704.	684.
11000.	1469.	689.	678.	658.
12000.	1468.	663.	652.	631.
13000.	1464.	639.	628.	606.
14000.	1462.	615.	604.	581.
15000.	1458.	592.	581.	558.
16000.	1456.	570.	558.	534.
18000.	1444.	528.	516.	491.
20000.	1401.	488.	475.	450.
25000.	1295.	399.	386.	359.
30000.	1196.	323.	310.	286.
35000.	958.	258.	247.	228.
40000.	793.	205.	195.	181.
45000.	726.	161.	153.	144.
50000.	648.	127.	120.	113.
55000.	539.	100.	94.	89.
60000.	486.	78.	74.	69.
65000.	439.	61.	58.	54.
70000.	408.	48.0	45.5	42.5
75000.	381.	38.0	35.5	33.5
80000.	353.	30.0	28.0	26.5
85000.	334.	23.5	22.5	21.0
90000.	311.	18.7	17.8	16.5
95000.	276.	15.0	14.2	13.1
100000.	211.	12.0	11.3	10.4

TABLE XII (CONT)
 MEAN AND EXTREME UPPER AIR PRESSURES (MILLIBARS)
 AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SEASON		MEAN	MINIMUM
		MAXIMUM	MINIMUM		
4940.	997.	860.	851.	838.	
5000.	1085.	858.	849.	836.	
6000.	1036.	828.	820.	808.	
7000.	1086.	799.	791.	780.	
8000.	1088.	771.	764.	752.	
9000.	1087.	743.	737.	725.	
10000.	1087.	717.	711.	699.	
11000.	1087.	692.	686.	673.	
12000.	1089.	667.	661.	647.	
13000.	1088.	643.	637.	623.	
14000.	1087.	620.	614.	599.	
15000.	1083.	597.	591.	576.	
16000.	1081.	575.	569.	554.	
17000.	1072.	533.	527.	512.	
20000.	1058.	494.	487.	473.	
25000.	943.	406.	399.	385.	
30000.	941.	331.	324.	306.	
35000.	818.	267.	261.	250.	
40000.	711.	214.	207.	197.	
45000.	635.	169.	163.	155.	
50000.	590.	133.	127.	122.	
55000.	526.	103.	99.	95.	
60000.	493.	80.	77.	74.	
65000.	454.	63.	60.	58.	
70000.	431.	49.5	47.5	45.5	
75000.	413.	39.0	37.5	36.0	
80000.	400.	31.0	29.5	28.5	
85000.	382.	24.5	23.5	22.5	
90000.	354.	19.7	18.7	17.8	
95000.	322.	15.8	15.0	14.1	
100000.	282.	12.7	12.0	11.3	

TABLE XII (CONT)
MEAN AND EXTREME UPPER AIR PRESSURES (MILLIHARS)
AT SELECTED LEVELS BY SEASONS
STATION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
4940.	1036.	865.	851.	835.
5000.	1190.	863.	849.	833.
6000.	1188.	831.	819.	802.
7000.	1188.	800.	790.	773.
8000.	1190.	771.	761.	744.
9000.	1191.	744.	734.	716.
10000.	1190.	718.	707.	689.
11000.	1190.	692.	682.	662.
12000.	1187.	667.	656.	637.
13000.	1186.	643.	632.	612.
14000.	1185.	619.	608.	588.
15000.	1182.	596.	586.	565.
16000.	1180.	574.	563.	542.
18000.	1177.	532.	521.	499.
20000.	1161.	492.	482.	459.
25000.	1080.	403.	393.	371.
30000.	1010.	327.	318.	298.
35000.	886.	264.	254.	236.
40000.	774.	210.	201.	187.
45000.	698.	166.	158.	148.
50000.	660.	129.	124.	116.
55000.	581.	100.	96.	91.
60000.	548.	78.	75.	71.
65000.	523.	61.	58.	55.
70000.	501.	48.0	46.0	43.0
75000.	476.	38.7	36.0	34.0
80000.	456.	30.0	29.5	26.5
85000.	431.	24.0	22.5	21.0
90000.	397.	19.0	17.9	16.6
95000.	344.	15.1	14.3	13.2
100000.	292.	12.1	11.4	10.5

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR DENSITY DATA

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TABLE XIII
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JANUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	546.	1179.	1065.	1005.
5000.	411.	1133.	1060.	992.
6000.	418.	1115.	1026.	968.
7000.	414.	1069.	992.	944.
8000.	417.	1032.	960.	918.
9000.	415.	997.	928.	893.
10000.	417.	957.	899.	868.
11000.	417.	920.	871.	842.
12000.	419.	891.	843.	815.
13000.	416.	861.	816.	791.
14000.	418.	832.	791.	767.
15000.	416.	806.	766.	744.
16000.	415.	778.	741.	722.
18000.	410.	720.	695.	676.
20000.	393.	670.	652.	631.
25000.	359.	568.	554.	540.
30000.	325.	477.	467.	439.
35000.	260.	399.	387.	354.
40000.	235.	332.	311.	285.
45000.	209.	272.	246.	228.
50000.	180.	211.	196.	182.
55000.	154.	167.	155.	143.
60000.	140.	128.	120.	113.
65000.	130.	98.	93.	88.
70000.	122.	75.	72.	69.
75000.	115.	58.	56.	54.
80000.	102.	45.	44.	42.
85000.	98.	36.	34.	33.
90000.	86.	28.	27.	26.
95000.	82.	22.	21.	20.
100000.	63.	18.	17.	16.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FEBRUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	362.	1140.	1055.	988.
5000.	469.	1133.	1052.	967.
6000.	473.	1095.	1021.	965.
7000.	469.	1056.	990.	941.
8000.	470.	1022.	961.	918.
9000.	466.	980.	931.	895.
10000.	470.	947.	902.	866.
11000.	463.	915.	874.	837.
12000.	468.	885.	846.	818.
13000.	462.	857.	819.	791.
14000.	466.	828.	793.	769.
15000.	464.	802.	768.	744.
16000.	466.	776.	744.	720.
18000.	463.	727.	698.	674.
20000.	451.	675.	654.	632.
25000.	404.	566.	554.	531.
30000.	358.	477.	466.	444.
35000.	280.	400.	385.	357.
40000.	250.	332.	307.	282.
45000.	221.	264.	243.	226.
50000.	192.	211.	195.	179.
55000.	158.	168.	154.	142.
60000.	143.	130.	120.	113.
65000.	124.	97.	93.	89.
70000.	103.	75.	72.	70.
75000.	96.	59.	56.	54.
80000.	88.	46.	44.	41.
85000.	87.	36.	34.	32.
90000.	82.	28.	27.	25.
95000.	78.	23.	21.	20.
100000.	62.	18.	17.	15.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH		
		MAXIMUM	MEAN	MINIMUM
4940.	388.	1124.	1040.	977.
5000.	481.	1120.	1040.	977.
6000.	483.	1074.	1011.	958.
7000.	482.	1042.	982.	934.
8000.	482.	1012.	954.	910.
9000.	480.	983.	926.	887.
10000.	480.	949.	898.	863.
11000.	475.	914.	871.	840.
12000.	474.	886.	844.	816.
13000.	473.	859.	818.	792.
14000.	472.	830.	793.	769.
15000.	472.	800.	768.	745.
16000.	472.	775.	744.	722.
18000.	470.	725.	697.	678.
20000.	461.	678.	653.	636.
25000.	411.	568.	553.	533.
30000.	349.	477.	465.	434.
35000.	257.	398.	384.	349.
40000.	208.	330.	308.	281.
45000.	188.	267.	243.	224.
50000.	158.	210.	194.	184.
55000.	134.	165.	153.	143.
60000.	116.	126.	119.	114.
65000.	100.	98.	93.	89.
70000.	96.	75.	72.	68.
75000.	87.	58.	56.	54.
80000.	80.	45.	44.	42.
85000.	77.	36.	35.	33.
90000.	66.	28.	27.	26.
95000.	61.	22.	21.	20.
100000.	48.	17.	17.	16.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECD 1961-1973
 APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	412.	1084.	1023.	983.
5000.	529.	1081.	1020.	971.
6000.	533.	1051.	995.	955.
7000.	528.	1022.	967.	929.
8000.	530.	994.	941.	905.
9000.	528.	961.	914.	882.
10000.	532.	931.	888.	860.
11000.	528.	905.	863.	837.
12000.	531.	876.	837.	814.
13000.	527.	849.	812.	793.
14000.	531.	822.	788.	769.
15000.	531.	793.	763.	744.
16000.	530.	767.	740.	721.
18000.	524.	720.	694.	676.
20000.	500.	673.	651.	635.
25000.	454.	568.	553.	539.
30000.	414.	477.	466.	441.
35000.	285.	400.	388.	358.
40000.	230.	332.	315.	288.
45000.	202.	269.	248.	232.
50000.	183.	207.	197.	184.
55000.	154.	165.	155.	145.
60000.	138.	129.	122.	116.
65000.	129.	98.	94.	89.
70000.	121.	76.	73.	70.
75000.	115.	59.	57.	55.
80000.	106.	46.	44.	43.
85000.	101.	36.	35.	34.
90000.	97.	28.	27.	26.
95000.	88.	22.	22.	20.
100000.	67.	18.	17.	16.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAY		
		MAXIMUM	MEAN	MINIMUM
4940.	408.	1073.	1004.	960.
5000.	457.	1068.	1003.	959.
6000.	460.	1028.	978.	937.
7000.	457.	998.	951.	916.
8000.	460.	970.	926.	895.
9000.	457.	943.	900.	874.
10000.	460.	917.	875.	852.
11000.	453.	892.	851.	828.
12000.	455.	865.	827.	809.
13000.	449.	837.	803.	787.
14000.	451.	813.	780.	762.
15000.	448.	788.	757.	738.
16000.	447.	765.	734.	718.
18000.	441.	703.	691.	676.
20000.	435.	670.	649.	632.
25000.	419.	566.	552.	539.
30000.	381.	475.	467.	455.
35000.	260.	400.	392.	374.
40000.	218.	331.	321.	299.
45000.	205.	273.	255.	239.
50000.	181.	213.	201.	189.
55000.	146.	167.	159.	149.
60000.	136.	131.	124.	117.
65000.	122.	101.	95.	90.
70000.	112.	77.	74.	72.
75000.	105.	59.	58.	56.
80000.	102.	46.	45.	44.
85000.	99.	36.	35.	34.
90000.	95.	28.	28.	27.
95000.	86.	23.	22.	21.
100000.	68.	18.	17.	17.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
4940.	319.	1039.	988.	943.
5000.	349.	1035.	987.	942.
6000.	351.	1001.	963.	922.
7000.	349.	968.	937.	903.
8000.	351.	938.	912.	883.
9000.	349.	911.	888.	861.
10000.	351.	885.	864.	840.
11000.	347.	863.	840.	819.
12000.	351.	840.	817.	795.
13000.	348.	809.	794.	777.
14000.	348.	786.	771.	757.
15000.	346.	765.	749.	735.
16000.	347.	744.	728.	714.
18000.	344.	701.	685.	672.
20000.	338.	659.	644.	630.
25000.	317.	560.	549.	533.
30000.	295.	477.	466.	455.
35000.	220.	398.	392.	381.
40000.	164.	334.	325.	310.
45000.	149.	277.	263.	246.
50000.	143.	224.	210.	199.
55000.	129.	176.	165.	155.
60000.	121.	133.	126.	121.
65000.	102.	101.	97.	94.
70000.	97.	79.	75.	73.
75000.	92.	63.	59.	57.
80000.	91.	48.	46.	45.
85000.	86.	38.	36.	35.
90000.	81.	30.	28.	28.
95000.	70.	24.	22.	22.
100000.	60.	19.	18.	17.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JULY		
		MAXIMUM	MEAN	MINIMUM
4940.	320.	1019.	985.	948.
5000.	350.	1017.	985.	947.
6000.	350.	990.	961.	927.
7000.	350.	964.	935.	904.
8000.	351.	934.	910.	882.
9000.	351.	908.	885.	861.
10000.	350.	883.	861.	841.
11000.	353.	854.	837.	819.
12000.	354.	830.	814.	793.
13000.	353.	811.	791.	778.
14000.	354.	782.	769.	757.
15000.	353.	761.	747.	737.
16000.	352.	739.	725.	718.
18000.	350.	693.	683.	672.
20000.	345.	653.	641.	632.
25000.	317.	555.	545.	538.
30000.	297.	469.	463.	454.
35000.	251.	399.	392.	385.
40000.	178.	333.	329.	324.
45000.	155.	275.	272.	267.
50000.	147.	225.	219.	211.
55000.	134.	176.	170.	165.
60000.	125.	133.	129.	125.
65000.	114.	101.	99.	97.
70000.	110.	78.	76.	74.
75000.	107.	61.	59.	58.
80000.	106.	48.	47.	45.
85000.	102.	38.	37.	36.
90000.	97.	30.	29.	28.
95000.	92.	23.	23.	22.
100000.	85.	19.	18.	18.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 S. LLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST		
		MAXIMUM	MEAN	MINIMUM
4940.	355.	1025.	990.	953.
5000.	384.	1026.	989.	953.
6000.	384.	992.	964.	932.
7000.	385.	962.	938.	909.
8000.	385.	936.	913.	887.
9000.	385.	912.	888.	865.
10000.	384.	889.	863.	844.
11000.	384.	862.	840.	824.
12000.	384.	836.	816.	801.
13000.	385.	810.	793.	780.
14000.	385.	785.	771.	758.
15000.	384.	760.	748.	732.
16000.	382.	737.	726.	709.
18000.	378.	694.	683.	667.
20000.	375.	650.	641.	626.
25000.	358.	554.	545.	534.
30000.	344.	471.	463.	453.
35000.	284.	399.	391.	386.
40000.	215.	334.	328.	321.
45000.	191.	275.	270.	261.
50000.	177.	225.	218.	207.
55000.	162.	178.	169.	162.
60000.	155.	133.	129.	124.
65000.	147.	102.	98.	95.
70000.	137.	78.	76.	75.
75000.	130.	61.	59.	58.
80000.	124.	48.	47.	46.
85000.	120.	38.	37.	36.
90000.	106.	30.	29.	28.
95000.	96.	24.	23.	22.
100000.	82.	19.	18.	17.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	319.	1054.	1000.	959.
5000.	361.	1049.	999.	959.
6000.	364.	1015.	974.	939.
7000.	361.	988.	946.	917.
8000.	365.	961.	921.	896.
9000.	362.	933.	895.	874.
10000.	365.	907.	870.	851.
11000.	360.	881.	846.	829.
12000.	364.	855.	822.	808.
13000.	360.	822.	798.	786.
14000.	364.	796.	774.	761.
15000.	363.	772.	751.	738.
16000.	363.	747.	728.	714.
18000.	361.	702.	683.	669.
20000.	359.	660.	641.	627.
25000.	345.	562.	547.	534.
30000.	323.	473.	464.	448.
35000.	251.	397.	390.	374.
40000.	202.	331.	324.	303.
45000.	188.	274.	265.	246.
50000.	181.	224.	214.	201.
55000.	159.	173.	166.	154.
60000.	147.	131.	127.	121.
65000.	138.	100.	97.	93.
70000.	128.	78.	75.	73.
75000.	124.	61.	59.	57.
80000.	121.	47.	46.	44.
85000.	115.	37.	36.	35.
90000.	105.	29.	28.	27.
95000.	91.	23.	22.	22.
100000.	80.	18.	18.	17.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	OCTOBER		
		MAXIMUM	MEAN	MINIMUM
4940.	362.	1085.	1020.	969.
5000.	412.	1080.	1019.	967.
6000.	417.	1043.	990.	944.
7000.	411.	1012.	960.	921.
8000.	417.	983.	933.	898.
9000.	413.	955.	906.	876.
10000.	418.	926.	879.	855.
11000.	413.	898.	853.	832.
12000.	412.	871.	828.	810.
13000.	413.	845.	803.	782.
14000.	417.	819.	778.	757.
15000.	416.	795.	755.	734.
16000.	414.	759.	731.	713.
18000.	413.	707.	687.	672.
20000.	410.	660.	645.	629.
25000.	387.	561.	550.	535.
30000.	362.	475.	467.	444.
35000.	290.	400.	392.	375.
40000.	242.	334.	322.	302.
45000.	208.	273.	261.	250.
50000.	204.	219.	208.	196.
55000.	182.	172.	163.	155.
60000.	176.	130.	125.	120.
65000.	167.	99.	96.	93.
70000.	161.	77.	74.	72.
75000.	153.	59.	58.	56.
80000.	146.	46.	45.	44.
85000.	136.	36.	35.	34.
90000.	125.	29.	28.	27.
95000.	110.	23.	22.	21.
100000.	97.	18.	17.	17.

TABLE XIII. (CONT.)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	341.	1114.	1042.	992.
5000.	401.	1112.	1041.	996.
6000.	405.	1074.	1010.	972.
7000.	400.	1033.	979.	944.
8000.	405.	996.	949.	914.
9000.	399.	965.	920.	892.
10000.	406.	934.	891.	860.
11000.	401.	901.	863.	835.
12000.	403.	873.	836.	812.
13000.	397.	842.	809.	786.
14000.	402.	810.	784.	762.
15000.	401.	785.	759.	740.
16000.	401.	760.	736.	717.
18000.	400.	712.	691.	671.
20000.	390.	675.	648.	632.
25000.	344.	563.	551.	535.
30000.	310.	479.	465.	438.
35000.	243.	400.	388.	357.
40000.	184.	335.	319.	297.
45000.	166.	275.	256.	238.
50000.	152.	221.	203.	190.
55000.	129.	169.	159.	150.
60000.	118.	128.	123.	115.
65000.	113.	98.	95.	91.
70000.	109.	75.	73.	71.
75000.	102.	54.	57.	55.
80000.	98.	45.	44.	42.
85000.	93.	36.	35.	32.
90000.	85.	24.	27.	26.
95000.	69.	22.	21.	20.
100000.	52.	17.	17.	16.

TABLE XIII (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	293.	1125.	1063.	1011.
5000.	324.	1121.	1061.	1009.
6000.	328.	1075.	1025.	983.
7000.	325.	1038.	992.	957.
8000.	328.	997.	959.	925.
9000.	325.	964.	928.	896.
10000.	328.	931.	898.	871.
11000.	324.	899.	870.	840.
12000.	328.	870.	841.	814.
13000.	324.	844.	814.	786.
14000.	328.	812.	788.	769.
15000.	327.	785.	763.	745.
16000.	327.	758.	739.	724.
18000.	325.	711.	694.	678.
20000.	321.	667.	650.	634.
25000.	303.	566.	552.	528.
30000.	263.	476.	465.	442.
35000.	206.	406.	386.	357.
40000.	178.	330.	312.	286.
45000.	154.	263.	248.	232.
50000.	144.	208.	197.	183.
55000.	124.	163.	155.	145.
60000.	123.	126.	121.	115.
65000.	119.	97.	94.	87.
70000.	111.	76.	72.	69.
75000.	110.	58.	56.	54.
80000.	107.	45.	44.	43.
85000.	105.	35.	34.	33.
90000.	100.	28.	27.	26.
95000.	93.	22.	21.	21.
100000.	77.	17.	17.	16.

TABLE XIV
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 WINTER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	1001.	1179.	1061.	988.
5000.	1204.	1133.	1057.	967.
6000.	1219.	1115.	1024.	965.
7000.	1208.	1059.	992.	941.
8000.	1215.	1032.	960.	918.
9000.	1206.	997.	929.	893.
10000.	1215.	957.	900.	866.
11000.	1204.	920.	872.	837.
12000.	1215.	891.	844.	814.
13000.	1202.	861.	817.	786.
14000.	1212.	832.	791.	767.
15000.	1207.	806.	766.	744.
16000.	1208.	778.	742.	720.
18000.	1198.	727.	696.	674.
20000.	1165.	675.	652.	631.
25000.	1066.	568.	554.	528.
30000.	946.	477.	466.	439.
35000.	746.	406.	386.	354.
40000.	663.	332.	309.	282.
45000.	584.	272.	245.	226.
50000.	516.	211.	196.	179.
55000.	436.	168.	155.	142.
60000.	406.	130.	120.	113.
65000.	373.	98.	93.	87.
70000.	336.	76.	72.	69.
75000.	321.	59.	56.	54.
80000.	297.	46.	44.	41.
85000.	290.	36.	34.	32.
90000.	268.	28.	27.	25.
95000.	253.	23.	21.	20.
100000.	202.	18.	17.	15.

TABLE XIV (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SPRING		
		MAXIMUM	MEAN	MINIMUM
4940.	1208.	1124.	1022.	960.
5000.	1467.	1120.	1021.	959.
6000.	1476.	1074.	995.	937.
7000.	1467.	1042.	967.	916.
8000.	1472.	1012.	940.	895.
9000.	1465.	983.	914.	874.
10000.	1472.	949.	888.	852.
11000.	1456.	914.	862.	828.
12000.	1460.	886.	836.	809.
13000.	1449.	854.	811.	787.
14000.	1454.	830.	787.	762.
15000.	1451.	800.	763.	738.
16000.	1449.	775.	739.	718.
18000.	1435.	725.	694.	676.
20000.	1396.	678.	651.	632.
25000.	1284.	568.	553.	533.
30000.	1144.	477.	466.	434.
35000.	802.	400.	388.	349.
40000.	656.	332.	315.	281.
45000.	595.	273.	249.	224.
50000.	522.	213.	198.	184.
55000.	434.	167.	156.	143.
60000.	390.	131.	122.	114.
65000.	351.	101.	94.	89.
70000.	329.	77.	73.	68.
75000.	307.	59.	57.	54.
80000.	288.	46.	45.	42.
85000.	277.	36.	35.	33.
90000.	258.	28.	27.	26.
95000.	235.	23.	22.	20.
100000.	183.	18.	17.	16.

TABLE XIV (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GRAMS/CUBIC METER)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SUMMER		
		MAXIMUM	MEAN	MINIMUM
4940.	994.	1039.	988.	943.
5000.	1083.	1035.	987.	942.
6000.	1085.	1001.	963.	922.
7000.	1084.	968.	937.	903.
8000.	1087.	938.	912.	882.
9000.	1085.	912.	887.	861.
10000.	1085.	889.	863.	840.
11000.	1084.	863.	839.	819.
12000.	1089.	840.	816.	795.
13000.	1086.	811.	793.	777.
14000.	1087.	786.	770.	757.
15000.	1083.	765.	748.	732.
16000.	1081.	744.	726.	709.
18000.	1072.	701.	683.	667.
20000.	1058.	659.	642.	626.
25000.	992.	560.	546.	533.
30000.	936.	477.	464.	453.
35000.	755.	399.	392.	381.
40000.	557.	334.	327.	310.
45000.	495.	277.	269.	246.
50000.	467.	225.	216.	199.
55000.	425.	178.	168.	155.
60000.	401.	133.	128.	121.
65000.	363.	102.	98.	94.
70000.	344.	79.	76.	73.
75000.	329.	63.	59.	57.
80000.	321.	48.	46.	45.
85000.	308.	38.	36.	35.
90000.	284.	30.	29.	28.
95000.	258.	24.	23.	22.
100000.	227.	19.	18.	17.

TABLE XIV (CONT)
 MEAN AND EXTREME UPPER AIR DENSITIES (GFAMS/CUBIC METER)
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
4940.	1022.	1114.	1021.	959.
5000.	1174.	1112.	1020.	959.
6000.	1186.	1078.	992.	939.
7000.	1172.	1033.	962.	917.
8000.	1187.	996.	934.	896.
9000.	1174.	965.	907.	874.
10000.	1189.	934.	881.	851.
11000.	1174.	901.	854.	829.
12000.	1185.	873.	829.	808.
13000.	1170.	845.	803.	782.
14000.	1183.	819.	779.	757.
15000.	1180.	795.	755.	734.
16000.	1178.	760.	732.	713.
18000.	1174.	712.	687.	669.
20000.	1159.	675.	645.	627.
25000.	1076.	563.	549.	534.
30000.	995.	479.	465.	438.
35000.	784.	400.	390.	357.
40000.	628.	335.	322.	297.
45000.	562.	275.	261.	238.
50000.	537.	224.	209.	190.
55000.	470.	173.	163.	150.
60000.	441.	131.	125.	115.
65000.	418.	100.	96.	91.
70000.	398.	78.	74.	71.
75000.	379.	61.	58.	55.
80000.	365.	47.	45.	42.
85000.	344.	38.	35.	32.
90000.	315.	29.	28.	26.
95000.	270.	23.	22.	20.
100000.	229.	18.	17.	16.

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR MOISTURE DATA

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TABLE XV
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/PILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	417.	7.554	2.729	.290
5000.	418.	5.783	2.372	.444
7000.	416.	7.044	2.213	.401
6000.	416.	5.861	2.004	.402
4000.	414.	5.322	1.819	.293
10000.	410.	4.797	1.645	.171
11000.	411.	4.663	1.472	.064
12000.	409.	4.160	1.321	.166
13000.	405.	4.003	1.184	.059
14000.	405.	3.791	1.049	.027
15000.	397.	4.047	.923	.077
16000.	395.	4.006	.823	.034
18000.	386.	3.214	.640	.010
20000.	373.	2.557	.482	.022
22000.	362.	1.851	.354	.044
24000.	351.	.992	.247	.007
26000.	318.	.809	.166	.002
28000.	246.	.553	.114	.001
30000.	155.	.290	.067	.001
32000.	75.	.179	.044	.001
34000.	30.	.083	.017	.001
36000.	6.	.024	.009	.001
38000.	0.	.000	.000	.000
40000.	0.	.000	.000	.000
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTH
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEODESIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FEBRUARY		
		MAXIMUM	MEAN	MINIMUM
5000.	475.	8.940	2.772	.712
6000.	475.	7.990	2.414	.642
7000.	475.	6.503	2.268	.516
8000.	470.	5.751	2.092	.170
9000.	470.	5.290	1.912	.143
10000.	466.	4.837	1.729	.262
11000.	463.	4.452	1.523	.062
12000.	460.	4.314	1.320	.172
13000.	457.	4.303	1.147	.057
14000.	454.	4.241	.979	.033
15000.	450.	5.066	.857	.020
16000.	451.	4.852	.764	.056
17000.	450.	3.990	.576	.011
20000.	435.	3.283	.447	.005
22000.	418.	2.452	.337	.005
24000.	378.	1.664	.254	.005
26000.	342.	1.086	.179	.002
28000.	265.	.691	.125	.002
30000.	177.	.421	.080	.001
32000.	85.	.264	.053	.001
34000.	38.	.199	.034	.001
36000.	15.	.153	.025	.001
38000.	4.	.009	.006	.001
40000.	1.	.001	.001	.001
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)
 NEAR AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/PILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	483.	8.148	2.737	.581
6000.	482.	6.539	2.361	.254
7000.	484.	5.966	2.191	.055
8000.	480.	5.325	2.044	.287
9000.	480.	5.002	1.881	.196
10000.	474.	4.951	1.698	.124
11000.	472.	4.518	1.511	.173
12000.	464.	4.233	1.324	.036
13000.	469.	3.935	1.160	.032
14000.	465.	3.453	1.000	.032
15000.	465.	3.476	.867	.022
16000.	463.	3.167	.756	.026
18000.	453.	3.002	.588	.013
20000.	445.	2.418	.454	.010
22000.	421.	1.609	.340	.012
24000.	396.	1.115	.248	.011
26000.	337.	.695	.178	.005
28000.	262.	.485	.123	.003
30000.	181.	.333	.071	.002
32000.	93.	.220	.040	.001
34000.	38.	.044	.018	.001
36000.	9.	.045	.013	.002
38000.	4.	.044	.023	.002
40000.	3.	.042	.034	.019
42000.	3.	.038	.032	.022
44000.	3.	.045	.030	.019
46000.	2.	.034	.025	.017
48000.	2.	.034	.026	.017
50000.	2.	.038	.027	.015

TABLE XV (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/GRAM) AT SELECTED LEVELS
 BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	APRIL		
		MAXIMUM	MEAN	MINIMUM
5000.	533.	8.579	3.152	.200
6000.	523.	7.543	2.803	.120
7000.	524.	7.154	2.567	.102
8000.	518.	6.589	2.408	.172
9000.	518.	5.890	2.188	.980
10000.	518.	5.005	1.961	.133
11000.	517.	4.887	1.763	.050
12000.	509.	4.568	1.590	.262
13000.	503.	4.222	1.400	.147
14000.	497.	3.876	1.234	.040
15000.	488.	3.533	1.067	.068
16000.	483.	3.214	.927	.057
18000.	468.	2.505	.655	.021
20000.	435.	2.073	.497	.033
22000.	412.	1.709	.357	.026
24000.	390.	1.212	.270	.006
26000.	357.	.673	.190	.004
28000.	308.	.446	.130	.006
30000.	222.	.275	.076	.002
32000.	108.	.146	.036	.002
34000.	47.	.063	.016	.001
36000.	14.	.020	.008	.001
38000.	5.	.004	.002	.001
40000.	0.	.000	.000	.000
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE IV (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	453.	9.983	4.459	.262
6000.	450.	10.093	3.824	.437
7000.	446.	8.757	3.549	.144
8000.	444.	7.760	3.308	.129
9000.	444.	7.455	3.031	.297
10000.	444.	6.467	2.721	.084
11000.	446.	6.956	2.455	.084
12000.	445.	6.912	2.199	.063
13000.	444.	6.481	1.974	.150
14000.	442.	6.034	1.769	.058
15000.	437.	5.569	1.595	.045
16000.	434.	5.134	1.423	.054
18000.	428.	4.279	1.033	.122
20000.	417.	3.515	.738	.143
22000.	406.	2.334	.503	.027
24000.	400.	1.444	.355	.019
26000.	385.	1.049	.253	.006
28000.	359.	.754	.174	.004
30000.	300.	.483	.112	.002
32000.	162.	.296	.072	.002
34000.	93.	.137	.028	.001
36000.	30.	.062	.011	.001
38000.	5.	.026	.007	.001
40000.	1.	.006	.006	.006
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)
GRAIN MIXING RATIOS (GRAMS/PILOGRAM) AT SELECTED LEVELS
BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTIMETER M32L FLEET		JUNE		TOTAL OBSERVATIONS		MAXIMUM		MEAN		MINIMUM	
5000.	345.	13.018	6.185	.904							
5000.	344.	12.714	5.358	.478							
7000.	343.	12.618	4.956	.226							
5000.	346.	12.105	4.566	1.246							
5000.	345.	11.633	4.204	1.118							
10000.	346.	9.676	3.800	.705							
11000.	345.	8.864	3.468	.272							
12000.	346.	8.293	3.134	.100							
13000.	345.	7.584	2.845	.264							
14000.	344.	6.579	2.554	.279							
15000.	340.	6.702	2.289	.067							
16000.	342.	6.315	2.018	.053							
16000.	334.	5.790	1.544	.044							
20000.	323.	4.868	1.085	.059							
22000.	308.	4.553	.727	.048							
24000.	295.	2.414	.510	.026							
25000.	283.	1.386	.358	.048							
26000.	279.	.856	.255	.010							
30000.	257.	.598	.168	.006							
32000.	181.	.510	.121	.004							
34000.	131.	.368	.068	.003							
35000.	68.	.186	.036	.003							
36000.	38.	.083	.025	.001							
40000.	22.	.049	.022	.002							
42000.	16.	.041	.019	.001							
44000.	13.	.036	.018	.001							
46000.	12.	.033	.016	.008							
48000.	12.	.028	.013	.007							
50000.	13.	.030	.013	.005							

TABLE XV (CONT)

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	350.	16.716	10.061	2.527
6000.	349.	13.312	8.232	.984
7000.	349.	13.526	7.724	.273
8000.	350.	13.691	7.191	.714
9000.	350.	11.717	6.661	1.665
10000.	349.	10.745	6.138	2.197
11000.	353.	10.020	5.583	.694
12000.	353.	9.256	5.080	1.020
13000.	354.	8.477	4.618	.924
14000.	354.	7.837	4.191	.356
15000.	353.	7.204	3.778	.750
16000.	352.	6.634	3.358	.621
18000.	344.	5.518	2.605	.126
20000.	334.	4.779	1.914	.338
22000.	319.	3.890	1.328	.075
24000.	303.	2.995	.900	.025
26000.	281.	2.210	.655	.022
28000.	273.	1.440	.447	.047
30000.	264.	.840	.306	.014
32000.	240.	.567	.206	.009
34000.	199.	.387	.132	.004
36000.	116.	.246	.063	.003
38000.	69.	.102	.042	.002
40000.	47.	.061	.027	.001
42000.	29.	.038	.023	.001
44000.	22.	.024	.017	.010
46000.	22.	.017	.010	.005
48000.	21.	.013	.007	.005
50000.	21.	.008	.005	.003

TABLE XV (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	383.	14.866	9.698	4.335
6000.	382.	13.346	7.950	.293
7000.	383.	12.129	7.406	.197
8000.	382.	11.576	6.953	.783
9000.	385.	11.749	6.500	.785
10000.	384.	10.888	6.054	1.622
11000.	384.	10.192	5.557	1.268
12000.	383.	8.544	5.105	.919
13000.	383.	8.176	4.646	.842
14000.	383.	7.134	4.153	.752
15000.	381.	6.983	3.660	.454
16000.	378.	6.482	3.223	.612
17000.	372.	5.191	2.367	.122
20000.	354.	4.114	1.674	.174
22000.	340.	3.465	1.142	.034
24000.	331.	2.637	.823	.022
26000.	325.	1.696	.564	.023
28000.	315.	1.190	.399	.046
30000.	313.	.823	.279	.014
32000.	276.	.667	.195	.005
34000.	224.	.394	.122	.005
36000.	114.	.240	.052	.003
38000.	65.	.122	.027	.002
40000.	34.	.058	.012	.002
42000.	9.	.030	.012	.001
44000.	4.	.020	.011	.003
46000.	2.	.015	.012	.010
48000.	2.	.010	.008	.005
50000.	2.	.009	.006	.003

MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 TABLE XV (CONT)
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SEPTEMBER		
		MAXIMUM	MEAN	MINIMUM
5000.	365.	14.696	8.069	2.207
6000.	363.	12.827	6.751	1.908
7000.	364.	11.987	6.316	.716
8000.	363.	11.922	5.910	1.761
9000.	366.	11.424	5.420	1.187
10000.	364.	9.782	4.971	1.122
11000.	362.	8.520	4.532	.912
12000.	360.	7.940	4.096	.823
13000.	358.	8.638	3.590	.561
14000.	357.	7.154	3.147	.089
15000.	351.	6.929	2.668	.434
16000.	337.	6.751	2.324	.292
18000.	325.	6.102	1.689	.026
20000.	312.	4.540	1.163	.120
22000.	296.	2.929	.769	.068
24000.	292.	2.236	.526	.054
26000.	285.	1.689	.392	.016
28000.	274.	1.370	.304	.006
30000.	256.	.774	.209	.004
32000.	188.	.523	.163	.004
34000.	119.	.327	.097	.003
36000.	59.	.162	.042	.002
38000.	25.	.047	.020	.002
40000.	10.	.034	.008	.001
42000.	2.	.023	.012	.001
44000.	1.	.015	.015	.015
46000.	1.	.010	.010	.010
48000.	1.	.007	.007	.007
50000.	1.	.005	.005	.005

TABLE XV (CONT)
 MEAN AND EXTREME WIND MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	411.	12.040	5.031	1.718
6000.	410.	10.535	4.390	1.709
7000.	413.	11.524	4.111	.593
8000.	415.	10.829	3.778	.169
9000.	416.	9.437	3.450	1.106
10000.	415.	8.807	3.067	.748
11000.	409.	8.664	2.763	.590
12000.	404.	8.463	2.428	.398
13000.	397.	7.575	2.086	.077
14000.	384.	6.879	1.801	.130
15000.	372.	5.864	1.504	.120
16000.	362.	5.376	1.268	.196
18000.	355.	4.642	.956	.038
20000.	349.	3.956	.712	.061
22000.	345.	2.958	.542	.118
24000.	336.	2.178	.415	.136
26000.	327.	1.621	.315	.091
28000.	325.	1.232	.220	.012
30000.	287.	.923	.154	.014
32000.	152.	.535	.114	.004
34000.	89.	.347	.060	.002
36000.	29.	.221	.035	.001
38000.	11.	.119	.031	.001
40000.	3.	.024	.019	.016
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)
 LEAD AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER		
		MAXIMUM	MEAN	MINIMUM
5000.	408.	7.684	3.652	1.123
6000.	407.	8.056	3.250	1.138
7000.	407.	8.248	3.038	1.107
8000.	408.	8.717	2.800	.770
9000.	405.	7.766	2.515	.663
10000.	399.	7.102	2.256	.568
11000.	394.	6.021	1.952	.091
12000.	394.	5.687	1.672	.214
13000.	387.	5.701	1.490	.118
14000.	347.	5.448	1.289	.029
15000.	380.	5.440	1.120	.031
16000.	389.	4.865	.980	.215
18000.	372.	3.863	.804	.121
20000.	358.	3.253	.634	.061
22000.	345.	2.820	.506	.100
24000.	324.	2.086	.383	.021
26000.	293.	1.711	.277	.012
28000.	269.	1.249	.201	.006
30000.	204.	.743	.137	.003
32000.	107.	.450	.085	.004
34000.	62.	.282	.041	.002
36000.	20.	.034	.013	.001
38000.	5.	.004	.003	.002
40000.	0.	.000	.000	.000
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XV (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	327.	7.368	2.860	.355
6000.	328.	7.070	2.586	.401
7000.	327.	7.403	2.453	.524
8000.	327.	6.457	2.206	.438
9000.	324.	5.749	1.949	.319
10000.	319.	6.173	1.763	.035
11000.	315.	5.479	1.580	.057
12000.	311.	5.456	1.395	.045
13000.	310.	5.343	1.213	.021
14000.	307.	4.316	1.072	.058
15000.	305.	3.725	.923	.038
16000.	301.	3.348	.815	.153
18000.	297.	2.630	.626	.055
20000.	291.	2.311	.487	.012
22000.	288.	1.298	.379	.054
24000.	279.	1.130	.283	.007
26000.	260.	.731	.199	.008
28000.	233.	.535	.139	.003
30000.	156.	.345	.089	.002
32000.	63.	.191	.053	.002
34000.	28.	.056	.022	.002
36000.	3.	.019	.016	.011
38000.	2.	.002	.001	.001
40000.	0.	.000	.000	.000
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XVI
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	JANUARY		
	TOTAL OBSERVATIONS	MAXIMUM	MEAN
4400.- 6000.	338.	.104	.079
6000.- 8000.	403.	.324	.127
8000.- 10000.	400.	.214	.099
10000.- 12000.	394.	.220	.075
12000.- 14000.	399.	.176	.057
14000.- 16000.	393.	.149	.042
16000.- 18000.	386.	.145	.030
18000.- 20000.	361.	.107	.021
20000.- 22000.	344.	.071	.015
22000.- 24000.	333.	.042	.010
24000.- 26000.	304.	.027	.006
26000.- 28000.	253.	.016	.004
28000.- 30000.	183.	.009	.003
30000.- 32000.	93.	.006	.002
32000.- 34000.	41.	.003	.001
34000.- 36000.	8.	.001	.000
36000.- 38000.	0.	.000	.000
38000.- 40000.	0.	.000	.000
40000.- 42000.	0.	.000	.000
42000.- 44000.	0.	.000	.000
44000.- 46000.	0.	.000	.000
46000.- 48000.	0.	.000	.000
48000.- 50000.	0.	.000	.000

TABLE XVI (CONT)
 MEAN AND EXTREME WINDY AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.- 6000.	325.	.198	.076	.028
6000.- 8000.	426.	.339	.123	.028
8000.- 10000.	426.	.270	.097	.016
10000.- 12000.	421.	.217	.072	.019
12000.- 14000.	418.	.190	.050	.010
14000.- 16000.	415.	.138	.035	.006
16000.- 18000.	419.	.105	.026	.004
18000.- 20000.	400.	.082	.019	.003
20000.- 22000.	378.	.061	.013	.001
22000.- 24000.	343.	.044	.010	.001
24000.- 26000.	317.	.030	.007	.001
26000.- 28000.	271.	.020	.004	.001
28000.- 30000.	186.	.012	.003	.000
30000.- 32000.	86.	.008	.002	.000
32000.- 34000.	32.	.005	.001	.000
34000.- 36000.	13.	.002	.001	.000
36000.- 38000.	4.	.000	.000	.000
38000.- 40000.	1.	.000	.000	.000
40000.- 42000.	0.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 TABLE XVI (CONT)
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE FSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4440.- 6600.	352.	.239	.087	.023
6000.- 8600.	447.	.356	.131	.041
8000.- 10000.	446.	.268	.104	.029
10000.- 12000.	438.	.226	.078	.019
12000.- 14000.	430.	.149	.056	.009
14000.- 16000.	436.	.112	.039	.006
16000.- 18000.	434.	.114	.028	.003
18000.- 20000.	424.	.080	.020	.002
20000.- 22000.	399.	.051	.015	.001
22000.- 24000.	369.	.040	.010	.001
24000.- 26000.	328.	.023	.007	.001
26000.- 28000.	279.	.016	.005	.000
28000.- 30000.	196.	.010	.003	.000
30000.- 32000.	100.	.005	.002	.000
32000.- 34000.	37.	.002	.001	.000
34000.- 36000.	8.	.001	.001	.000
36000.- 38000.	3.	.001	.001	.000
38000.- 40000.	3.	.001	.001	.000
40000.- 42000.	3.	.001	.001	.000
42000.- 44000.	3.	.001	.001	.000
44000.- 46000.	2.	.001	.000	.000
46000.- 48000.	2.	.000	.000	.000
48000.- 50000.	2.	.000	.000	.000

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 TABLE XVI (CONT)
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	APRIL		
		MAXIMUM	MEAN	MINIMUM
4940.- - 6000.	345.	.245	.099	.040
6000.- - 7000.	464.	.359	.156	.061
8000.- - 10000.	465.	.312	.122	.035
10000.- - 12000.	464.	.223	.092	.028
12000.- - 14000.	464.	.173	.068	.019
14000.- - 16000.	465.	.155	.049	.013
16000.- - 18000.	458.	.117	.033	.008
18000.- - 20000.	418.	.090	.022	.005
20000.- - 22000.	389.	.067	.015	.003
22000.- - 24000.	371.	.044	.011	.002
24000.- - 26000.	350.	.028	.008	.001
26000.- - 28000.	310.	.016	.005	.001
28000.- - 30000.	259.	.009	.003	.000
30000.- - 32000.	146.	.005	.002	.000
32000.- - 34000.	63.	.002	.001	.000
34000.- - 36000.	19.	.001	.000	.000
36000.- - 38000.	7.	.000	.000	.000
38000.- - 40000.	0.	.000	.000	.000
40000.- - 42000.	0.	.000	.000	.000
42000.- - 44000.	0.	.000	.000	.000
44000.- - 46000.	0.	.000	.000	.000
46000.- - 48000.	0.	.000	.000	.000
48000.- - 50000.	0.	.000	.000	.000

TABLE XVI (CONT)
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAY		
		MAXIMUM	MEAN	MINIMUM
4040.- - 6000.	414.	.294	.135	.030
6000.- - 8000.	463.	.402	.206	.042
8000.- - 10000.	463.	.392	.164	.033
10000.- - 12000.	460.	.311	.127	.026
12000.- - 14000.	459.	.236	.094	.014
14000.- - 16000.	453.	.175	.070	.015
16000.- - 18000.	449.	.142	.049	.005
18000.- - 20000.	435.	.106	.033	.007
20000.- - 22000.	427.	.075	.022	.004
22000.- - 24000.	423.	.044	.014	.002
24000.- - 26000.	410.	.036	.010	.001
26000.- - 28000.	390.	.022	.006	.001
28000.- - 30000.	343.	.013	.004	.000
30000.- - 32000.	231.	.010	.003	.000
32000.- - 34000.	137.	.005	.001	.000
34000.- - 36000.	43.	.002	.001	.000
36000.- - 38000.	10.	.001	.000	.000
38000.- - 40000.	2.	.000	.000	.000
40000.- - 42000.	0.	.000	.000	.000
42000.- - 44000.	0.	.000	.000	.000
44000.- - 46000.	0.	.000	.000	.000
46000.- - 48000.	0.	.000	.000	.000
48000.- - 50000.	0.	.000	.000	.000

TABLE XVI (CONT)
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
4940.- 6000.	320.	.394	.192	.041
6000.- 8000.	351.	.646	.294	.085
8000.- 10000.	351.	.567	.234	.068
10000.- 12000.	349.	.444	.184	.051
12000.- 14000.	349.	.334	.141	.036
14000.- 16000.	347.	.265	.104	.008
16000.- 18000.	341.	.222	.074	.006
18000.- 20000.	329.	.192	.050	.007
20000.- 22000.	321.	.169	.033	.004
22000.- 24000.	313.	.119	.022	.005
24000.- 26000.	304.	.049	.014	.003
26000.- 28000.	299.	.027	.009	.003
28000.- 30000.	281.	.020	.006	.001
30000.- 32000.	220.	.013	.004	.001
32000.- 34000.	180.	.011	.003	.001
34000.- 36000.	98.	.006	.001	.000
36000.- 38000.	54.	.003	.001	.000
38000.- 40000.	29.	.001	.001	.000
40000.- 42000.	20.	.001	.000	.000
42000.- 44000.	14.	.001	.000	.000
44000.- 46000.	12.	.001	.000	.000
46000.- 48000.	12.	.000	.000	.000
48000.- 50000.	12.	.000	.000	.000

MEAN AND EXTREME UPPER AIR PRECIPITATION WATER (CENTIMETERS) BETWEEN
 TABLE XVI (CONT)
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JULY	
		MAXIMUM	MINIMUM
4940.- - 6600.	230.	.443	.308
6000.- - 5000.	250.	.747	.450
8000.- - 10000.	257.	.639	.367
10000.- - 12000.	257.	.508	.292
12000.- - 14000.	258.	.405	.226
14000.- - 16000.	258.	.316	.173
16000.- - 18000.	257.	.247	.128
18000.- - 20000.	252.	.201	.090
20000.- - 22000.	241.	.154	.060
22000.- - 24000.	237.	.119	.039
24000.- - 26000.	225.	.084	.026
26000.- - 28000.	223.	.056	.017
28000.- - 30000.	222.	.034	.011
30000.- - 32000.	203.	.018	.007
32000.- - 34000.	177.	.011	.001
34000.- - 36000.	134.	.006	.001
36000.- - 38000.	86.	.003	.000
38000.- - 40000.	57.	.002	.000
40000.- - 42000.	32.	.001	.000
42000.- - 44000.	22.	.001	.000
44000.- - 46000.	22.	.000	.000
46000.- - 48000.	21.	.000	.000
48000.- - 50000.	21.	.000	.000

TABLE XVI (CONT)
 PEAK AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	AUGUST		
		MAXIMUM	MEAN	MINIMUM
4940.- 6000.	276.	.435	.294	.178
6000.- 8000.	305.	.675	.447	.242
8000.- 10000.	306.	.592	.363	.166
10000.- 12000.	306.	.456	.288	.084
12000.- 14000.	306.	.366	.222	.040
14000.- 16000.	306.	.299	.166	.031
16000.- 18000.	306.	.236	.118	.023
18000.- 20000.	301.	.174	.079	.015
20000.- 22000.	289.	.136	.052	.006
22000.- 24000.	287.	.097	.034	.008
24000.- 26000.	285.	.065	.022	.001
26000.- 28000.	282.	.043	.015	.002
28000.- 30000.	277.	.028	.010	.002
30000.- 32000.	245.	.016	.007	.001
32000.- 34000.	222.	.013	.004	.000
34000.- 36000.	157.	.007	.002	.000
36000.- 38000.	95.	.004	.001	.000
38000.- 40000.	51.	.002	.001	.000
40000.- 42000.	15.	.001	.000	.000
42000.- 44000.	6.	.000	.000	.000
44000.- 46000.	2.	.000	.000	.000
46000.- 48000.	2.	.000	.000	.000
48000.- 50000.	2.	.000	.000	.000

TABLE XVI (CONT)
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973
 SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4440.- 6000.	283.	.414	.243	.075
6000.- 8000.	325.	.661	.362	.133
8000.- 10000.	325.	.557	.287	.099
10000.- 12000.	324.	.413	.221	.054
12000.- 14000.	324.	.324	.164	.036
14000.- 16000.	321.	.284	.113	.021
16000.- 18000.	315.	.219	.075	.007
18000.- 20000.	311.	.170	.048	.003
20000.- 22000.	296.	.123	.032	.005
22000.- 24000.	294.	.086	.021	.006
24000.- 26000.	289.	.064	.014	.004
26000.- 28000.	283.	.041	.010	.001
28000.- 30000.	267.	.027	.007	.001
30000.- 32000.	201.	.017	.005	.001
32000.- 34000.	162.	.010	.003	.000
34000.- 36000.	99.	.005	.002	.000
36000.- 38000.	43.	.002	.001	.000
38000.- 40000.	18.	.001	.000	.000
40000.- 42000.	3.	.001	.000	.000
42000.- 44000.	1.	.000	.000	.000
44000.- 46000.	1.	.000	.000	.000
46000.- 48000.	1.	.000	.000	.000
48000.- 50000.	1.	.000	.000	.000

TABLE XVI (CONT)
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	OCTOBER		
		MAXIMUM	MEAN	MINIMUM
4940.- 6000.	250.	.367	.146	.057
6000.- 8000.	303.	.577	.226	.090
8000.- 10000.	303.	.513	.179	.027
10000.- 12000.	301.	.425	.137	.037
12000.- 14000.	295.	.347	.101	.017
14000.- 16000.	293.	.254	.069	.010
16000.- 18000.	294.	.210	.045	.012
18000.- 20000.	297.	.170	.031	.005
20000.- 22000.	294.	.129	.023	.005
22000.- 24000.	291.	.088	.016	.004
24000.- 26000.	282.	.062	.011	.004
26000.- 28000.	279.	.044	.008	.002
28000.- 30000.	251.	.030	.005	.001
30000.- 32000.	187.	.014	.004	.001
32000.- 34000.	122.	.011	.002	.000
34000.- 36000.	48.	.006	.001	.000
36000.- 38000.	17.	.004	.001	.000
38000.- 40000.	3.	.001	.001	.000
40000.- 42000.	0.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 TABLE XVI (CONT)
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.- - 5000.	273.	.222	.113	.043
6000.- - 8000.	333.	.434	.175	.059
8000.- - 10000.	332.	.379	.138	.041
10000.- - 12000.	330.	.277	.099	.023
12000.- - 14000.	325.	.248	.070	.016
14000.- - 16000.	325.	.226	.052	.007
16000.- - 18000.	320.	.183	.039	.010
18000.- - 20000.	313.	.138	.029	.004
20000.- - 22000.	297.	.091	.022	.004
22000.- - 24000.	270.	.057	.016	.003
24000.- - 26000.	245.	.042	.011	.001
26000.- - 28000.	233.	.025	.008	.001
28000.- - 30000.	208.	.013	.005	.001
30000.- - 32000.	139.	.004	.003	.001
32000.- - 34000.	89.	.004	.002	.000
34000.- - 36000.	38.	.002	.001	.000
36000.- - 38000.	0.	.000	.000	.000
38000.- - 40000.	0.	.000	.000	.000
40000.- - 42000.	0.	.000	.000	.000
42000.- - 44000.	0.	.000	.000	.000
44000.- - 46000.	0.	.000	.000	.000
46000.- - 48000.	0.	.000	.000	.000
48000.- - 50000.	0.	.000	.000	.000

MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 TABLE XVI (CONT)
 SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
4000.- 6000.	206.	.192	.098	.030
6000.- 8000.	237.	.368	.147	.044
8000.- 10000.	237.	.266	.114	.027
10000.- 12000.	257.	.282	.087	.016
12000.- 14000.	257.	.235	.063	.015
14000.- 16000.	233.	.160	.043	.011
16000.- 18000.	231.	.112	.031	.005
18000.- 20000.	226.	.043	.022	.005
20000.- 22000.	219.	.056	.017	.003
22000.- 24000.	211.	.031	.012	.002
24000.- 26000.	200.	.027	.008	.001
26000.- 28000.	179.	.014	.005	.001
28000.- 30000.	135.	.013	.003	.000
30000.- 32000.	58.	.007	.003	.000
32000.- 34000.	28.	.003	.001	.000
34000.- 36000.	4.	.001	.001	.001
36000.- 38000.	2.	.000	.000	.000
38000.- 40000.	0.	.000	.000	.000
40000.- 42000.	0.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XVII
 STATION AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION: SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JANUARY		
		MAXIMUM	MEAN	MINIMUM
1940.	349.	99.	44.	11.
5000.	417.	99.	43.	6.
6000.	418.	99.	37.	10.
7000.	417.	99.	36.	10.
8000.	417.	99.	35.	10.
9000.	415.	99.	34.	5.
10000.	412.	99.	33.	3.
11000.	412.	99.	32.	1.
12000.	410.	100.	32.	3.
13000.	407.	99.	31.	2.
14000.	406.	99.	30.	1.
15000.	398.	99.	30.	2.
16000.	396.	99.	29.	2.
18000.	387.	99.	29.	1.
20000.	374.	99.	29.	3.
22000.	363.	99.	29.	6.
24000.	352.	99.	28.	1.
26000.	319.	99.	27.	1.
28000.	247.	96.	23.	1.
30000.	155.	79.	18.	1.
32000.	75.	66.	17.	1.
34000.	30.	34.	9.	1.
36000.	6.	16.	6.	1.
38000.	0.	0.	0.	0.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FEBRUARY		
		MAXIMUM	MEAN	MINIMUM
4940.	337.	98.	41.	9.
5000.	446.	98.	39.	5.
6000.	645.	99.	37.	9.
7000.	445.	94.	38.	13.
8000.	442.	90.	39.	5.
9000.	442.	100.	34.	2.
10000.	438.	100.	39.	6.
11000.	454.	100.	38.	2.
12000.	431.	99.	36.	3.
13000.	428.	99.	34.	2.
14000.	425.	99.	32.	1.
15000.	421.	99.	31.	1.
16000.	422.	99.	31.	2.
17000.	421.	99.	30.	1.
20000.	406.	99.	30.	1.
22000.	390.	91.	30.	1.
24000.	359.	99.	31.	1.
26000.	326.	79.	29.	1.
28000.	250.	70.	27.	1.
30000.	164.	69.	23.	1.
32000.	63.	67.	20.	1.
34000.	37.	47.	15.	1.
36000.	13.	25.	13.	1.
38000.	4.	14.	9.	1.
40000.	1.	2.	2.	2.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MARCH		
		MAXIMUM	MEAN	MINIMUM
4940.	361.	49.	33.	6.
5000.	456.	49.	33.	6.
6000.	455.	49.	32.	3.
7000.	457.	49.	33.	1.
8000.	453.	49.	35.	3.
9000.	453.	100.	36.	3.
10000.	451.	99.	37.	2.
11000.	446.	49.	37.	2.
12000.	445.	99.	36.	1.
13000.	444.	99.	35.	1.
14000.	440.	99.	33.	2.
15000.	439.	49.	32.	1.
16000.	437.	99.	31.	1.
18000.	426.	49.	31.	1.
20000.	420.	49.	31.	1.
22000.	396.	99.	31.	1.
24000.	375.	95.	30.	3.
26000.	318.	79.	29.	1.
28000.	246.	70.	27.	1.
30000.	167.	64.	21.	1.
32000.	92.	52.	16.	1.
34000.	37.	26.	11.	1.
36000.	9.	26.	11.	2.
38000.	4.	25.	16.	4.
40000.	3.	25.	20.	14.
42000.	3.	25.	19.	14.
44000.	3.	25.	19.	15.
46000.	2.	25.	20.	15.
48000.	2.	25.	20.	15.
50000.	2.	25.	20.	15.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	APRIL		
		MAXIMUM	MEAN	MINIMUM
4940.	345.	97.	27.	4.
5000.	513.	97.	26.	1.
6000.	503.	98.	27.	1.
7000.	504.	99.	28.	1.
8000.	448.	99.	30.	2.
9000.	448.	99.	31.	1.
10000.	498.	99.	32.	2.
11000.	407.	99.	32.	1.
12000.	489.	99.	33.	4.
13000.	483.	94.	33.	2.
14000.	477.	92.	33.	1.
15000.	468.	98.	32.	3.
16000.	463.	99.	31.	1.
17000.	448.	94.	28.	1.
20000.	413.	87.	28.	1.
22000.	393.	87.	26.	3.
24000.	371.	88.	27.	1.
26000.	339.	74.	26.	2.
28000.	292.	62.	24.	2.
30000.	207.	57.	19.	1.
32000.	105.	58.	12.	1.
34000.	44.	27.	8.	1.
36000.	14.	14.	7.	1.
38000.	5.	5.	3.	1.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAY		
		MAXIMUM	MEAN	MINIMUM
4940.	385.	94.	26.	4.
5000.	431.	91.	26.	2.
5000.	428.	97.	26.	2.
7000.	424.	100.	27.	1.
8000.	422.	100.	28.	1.
9000.	422.	100.	29.	3.
10000.	427.	97.	30.	1.
11000.	424.	97.	30.	1.
12000.	424.	99.	31.	1.
13000.	423.	99.	31.	2.
14000.	421.	99.	32.	1.
15000.	416.	99.	33.	1.
16000.	413.	99.	34.	1.
17000.	407.	100.	32.	3.
20000.	394.	99.	30.	7.
22000.	387.	99.	27.	1.
24000.	381.	90.	26.	1.
26000.	367.	80.	25.	1.
28000.	342.	69.	25.	1.
30000.	245.	72.	22.	1.
32000.	160.	64.	20.	1.
34000.	52.	49.	12.	1.
36000.	31.	31.	8.	1.
38000.	6.	20.	8.	1.
40000.	2.	36.	22.	8.
42000.	1.	23.	23.	23.
44000.	1.	15.	15.	15.
46000.	1.	7.	7.	7.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	JUNE		
		MAXIMUM	MEAN	MINIMUM
4940.	286.	95.	29.	3.
5000.	314.	94.	28.	3.
6000.	313.	71.	27.	2.
7000.	312.	76.	28.	1.
8000.	315.	40.	29.	7.
9000.	314.	45.	30.	10.
10000.	315.	73.	30.	7.
11000.	314.	46.	31.	3.
12000.	315.	98.	31.	1.
13000.	314.	94.	32.	3.
14000.	313.	94.	33.	4.
15000.	309.	98.	33.	1.
16000.	311.	99.	34.	1.
18000.	303.	99.	34.	1.
20000.	293.	99.	31.	2.
22000.	281.	99.	27.	2.
24000.	268.	92.	25.	2.
26000.	257.	46.	24.	5.
28000.	253.	41.	24.	1.
30000.	231.	52.	22.	1.
32000.	161.	57.	20.	1.
34000.	111.	60.	16.	1.
36000.	66.	36.	12.	1.
38000.	38.	31.	12.	1.
40000.	22.	29.	14.	1.
42000.	17.	28.	17.	1.
44000.	14.	27.	20.	1.
46000.	13.	26.	21.	16.
48000.	13.	27.	21.	16.
50000.	13.	26.	21.	16.

TABLE XVII (CONT.)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITF
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE FSL FEET	TOTAL OBSERVATIONS	JULY		
		MAXIMUM	MEAN	MINIMUM
4940.	294.	94.	45.	12.
5000.	324.	92.	43.	8.
6000.	323.	93.	40.	3.
7000.	325.	94.	41.	1.
8000.	324.	96.	42.	3.
9000.	324.	94.	44.	8.
10000.	324.	93.	45.	13.
11000.	327.	97.	45.	10.
12000.	327.	99.	46.	10.
13000.	328.	96.	47.	10.
14000.	328.	96.	48.	5.
15000.	327.	93.	49.	10.
16000.	326.	99.	49.	8.
17000.	318.	97.	47.	2.
20000.	308.	100.	43.	7.
22000.	293.	99.	37.	2.
24000.	277.	96.	31.	1.
26000.	259.	83.	29.	1.
28000.	253.	74.	27.	3.
30000.	249.	63.	25.	1.
32000.	220.	60.	24.	1.
34000.	179.	68.	22.	1.
36000.	155.	57.	16.	1.
38000.	64.	42.	15.	1.
40000.	47.	35.	15.	1.
42000.	29.	29.	19.	1.
44000.	22.	28.	22.	16.
46000.	22.	30.	21.	14.
48000.	21.	29.	21.	15.
50000.	21.	30.	21.	15.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE FSL FEET	AUGUST			
	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	324.	95.	45.	12.
5000.	353.	95.	45.	12.
6000.	352.	92.	41.	1.
7000.	353.	94.	42.	1.
8000.	352.	89.	43.	4.
9000.	355.	92.	45.	5.
10000.	354.	95.	47.	11.
11000.	354.	97.	48.	13.
12000.	353.	97.	50.	10.
13000.	353.	98.	51.	10.
14000.	353.	98.	51.	10.
15000.	351.	97.	51.	6.
16000.	348.	99.	50.	9.
18000.	342.	99.	45.	2.
20000.	324.	99.	40.	2.
22000.	312.	99.	33.	1.
24000.	303.	90.	30.	1.
26000.	298.	86.	26.	1.
28000.	290.	90.	25.	3.
30000.	287.	76.	24.	2.
32000.	253.	79.	24.	1.
34000.	206.	71.	22.	1.
36000.	111.	61.	13.	1.
38000.	64.	47.	10.	1.
40000.	33.	34.	7.	1.
42000.	9.	21.	8.	1.
44000.	4.	20.	12.	2.
46000.	2.	20.	19.	19.
48000.	2.	20.	19.	19.
50000.	2.	20.	19.	19.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SEPTEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	293.	93.	46.	14.
5000.	335.	93.	44.	11.
6000.	333.	92.	41.	7.
7000.	334.	94.	42.	3.
8000.	333.	96.	43.	12.
9000.	336.	98.	44.	6.
10000.	334.	95.	45.	13.
11000.	332.	97.	46.	11.
12000.	330.	99.	47.	10.
13000.	328.	96.	46.	9.
14000.	327.	95.	45.	1.
15000.	321.	96.	43.	9.
16000.	307.	100.	41.	8.
18000.	297.	99.	35.	1.
20000.	284.	99.	29.	3.
22000.	269.	92.	25.	2.
24000.	265.	97.	22.	2.
26000.	260.	97.	22.	1.
28000.	252.	84.	22.	1.
30000.	234.	60.	21.	1.
32000.	169.	63.	23.	1.
34000.	100.	65.	18.	1.
36000.	53.	30.	10.	1.
38000.	22.	13.	7.	1.
40000.	10.	13.	4.	1.
42000.	2.	14.	8.	1.
44000.	1.	14.	14.	14.
46000.	1.	14.	14.	14.
48000.	1.	15.	15.	15.
50000.	1.	15.	15.	15.

TABLE XVII (CONT)
 MAX AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	OCTOBER		
		MAXIMUM	MEAN	MINIMUM
4900.	330.	92.	37.	10.
5000.	380.	91.	37.	10.
5500.	379.	88.	34.	11.
7000.	382.	99.	34.	8.
8000.	384.	100.	34.	11.
9000.	385.	100.	34.	10.
10000.	384.	96.	34.	11.
11000.	378.	92.	33.	10.
12000.	373.	92.	32.	5.
13000.	366.	96.	30.	1.
14000.	353.	96.	29.	2.
15000.	341.	96.	27.	2.
16000.	332.	95.	25.	6.
18000.	325.	93.	23.	1.
20000.	319.	95.	22.	2.
22000.	316.	76.	22.	9.
24000.	308.	74.	23.	10.
26000.	299.	87.	24.	10.
28000.	297.	82.	24.	2.
30000.	259.	59.	23.	3.
32000.	128.	63.	21.	1.
34000.	68.	65.	13.	1.
36000.	26.	24.	7.	1.
38000.	8.	9.	5.	1.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

NOVEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4940.	315.	96.	40.	9.
5000.	375.	94.	40.	10.
6000.	374.	92.	38.	12.
7000.	374.	99.	38.	12.
8000.	375.	99.	38.	10.
9000.	372.	99.	37.	10.
10000.	366.	99.	37.	8.
11000.	367.	99.	35.	1.
12000.	362.	99.	33.	3.
13000.	355.	99.	31.	2.
14000.	355.	99.	29.	1.
15000.	348.	99.	28.	1.
16000.	348.	99.	27.	5.
18000.	340.	99.	26.	3.
20000.	326.	99.	28.	2.
22000.	313.	98.	29.	6.
24000.	294.	100.	29.	2.
25000.	265.	87.	29.	3.
28000.	242.	82.	29.	2.
30000.	184.	80.	26.	1.
32000.	99.	65.	21.	1.
34000.	57.	52.	15.	1.
36000.	20.	18.	8.	1.
38000.	3.	4.	4.	3.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVII (CONT)
 UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1921-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER		
		MAXIMUM	MEAN	MINIMUM
4940.	273.	46.	49.	13.
5000.	303.	46.	46.	8.
5000.	304.	49.	42.	4.
7000.	303.	49.	42.	11.
8000.	303.	49.	39.	11.
9000.	300.	49.	38.	9.
10000.	295.	100.	37.	1.
11000.	291.	99.	36.	1.
12000.	287.	100.	34.	2.
13000.	286.	100.	32.	1.
14000.	283.	99.	31.	1.
15000.	281.	95.	29.	1.
16000.	277.	99.	29.	5.
18000.	273.	94.	28.	2.
20000.	267.	99.	28.	1.
22000.	264.	76.	29.	7.
24000.	257.	47.	29.	1.
26000.	238.	75.	28.	1.
29000.	212.	77.	26.	1.
30000.	137.	78.	22.	1.
32000.	57.	71.	19.	1.
34000.	25.	31.	11.	1.
36000.	3.	13.	10.	6.
33000.	2.	2.	1.	1.
40000.	0.	0.	0.	0.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XVIII
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE FSL FEET	TOTAL OBSERVATIONS	WINTER		
		MAXIMUM	MEAN	MINIMUM
5000.	1217.	8.040	2.781	.290
6500.	1219.	7.090	2.446	.401
7000.	1216.	7.403	2.299	.401
8000.	1215.	6.457	2.092	.170
9000.	1208.	5.789	1.890	.143
10000.	1195.	6.173	1.709	.035
11000.	1149.	5.479	1.521	.057
12000.	1180.	5.456	1.340	.045
13000.	1172.	5.343	1.177	.021
14000.	1166.	4.316	1.028	.027
15000.	1152.	5.066	.897	.020
16000.	1147.	4.052	.796	.039
18000.	1135.	3.990	.611	.010
20000.	1099.	3.283	.470	.005
22000.	1064.	2.452	.354	.005
24000.	1004.	1.664	.259	.005
26000.	920.	1.046	.181	.002
28000.	744.	.691	.126	.001
30000.	488.	.421	.079	.001
32000.	225.	.264	.050	.001
34000.	96.	.199	.025	.001
36000.	22.	.153	.019	.001
38000.	6.	.009	.004	.001
40000.	1.	.001	.001	.001
42000.	0.	.000	.000	.000
44000.	0.	.000	.000	.000
46000.	0.	.000	.000	.000
48000.	0.	.000	.000	.000
50000.	0.	.000	.000	.000

TABLE XVIII (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SPRING		
		MAXIMUM	MEAN	MINIMUM
5000.	1464.	9.983	3.419	.200
6000.	1455.	10.093	2.972	.120
7000.	1454.	8.757	2.750	.055
8000.	1442.	7.760	2.564	.129
9000.	1442.	7.455	2.346	.086
10000.	1445.	6.367	2.110	.084
11000.	1435.	6.956	1.895	.058
12000.	1422.	6.912	1.693	.036
13000.	1416.	6.481	1.501	.032
14000.	1404.	6.034	1.325	.032
15000.	1390.	5.569	1.166	.022
16000.	1380.	5.134	1.026	.026
18000.	1349.	4.279	.752	.013
20000.	1295.	3.515	.560	.010
22000.	1239.	2.334	.399	.012
24000.	1186.	1.494	.291	.006
26000.	1079.	1.099	.209	.004
28000.	929.	.754	.145	.003
30000.	703.	.483	.090	.002
32000.	363.	.296	.053	.001
34000.	178.	.137	.022	.001
36000.	53.	.062	.011	.001
38000.	14.	.044	.010	.001
40000.	4.	.042	.027	.006
42000.	3.	.038	.032	.022
44000.	3.	.045	.030	.019
46000.	2.	.034	.025	.017
48000.	2.	.034	.026	.017
50000.	2.	.038	.027	.015

TABLE XVIII (CONT)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973
 SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
5000.	1078.	16.716	8.691	.908
6000.	1075.	13.346	7.212	.293
7000.	1075.	13.526	6.727	.197
8000.	1078.	13.691	6.264	.714
9000.	1080.	11.749	5.819	.785
10000.	1079.	10.888	5.358	.705
11000.	1082.	10.192	4.899	.272
12000.	1082.	9.256	4.467	.100
13000.	1082.	8.477	4.063	.264
14000.	1081.	7.837	3.657	.279
15000.	1074.	7.204	3.265	.067
16000.	1072.	6.634	2.883	.053
18000.	1050.	5.790	2.183	.044
20000.	1011.	4.868	1.565	.059
22000.	967.	4.553	1.071	.034
24000.	929.	2.995	.748	.022
26000.	889.	2.210	.527	.022
28000.	867.	1.440	.368	.010
30000.	839.	.880	.254	.006
32000.	697.	.667	.180	.004
34000.	554.	.394	.113	.003
36000.	503.	.246	.053	.003
38000.	172.	.122	.032	.001
40000.	103.	.061	.021	.001
42000.	54.	.041	.020	.001
44000.	39.	.036	.017	.001
46000.	36.	.033	.012	.005
48000.	35.	.028	.009	.005
50000.	36.	.030	.008	.003

TABLE XVIII (CONT.)
 MEAN AND EXTREME UPPER AIR MIXING RATIOS (GRAMS/KILOGRAM) AT SELECTED LEVELS
 BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
5000.	1184.	14.696	5.492	1.123
6000.	1180.	12.827	4.723	1.134
7000.	1184.	11.947	4.420	.593
8000.	1186.	11.422	4.094	.169
9000.	1187.	11.424	3.738	.663
10000.	1178.	9.782	3.388	.568
11000.	1170.	8.664	3.034	.091
12000.	1158.	8.463	2.689	.214
13000.	1142.	8.638	2.355	.077
14000.	1128.	7.154	2.051	.029
15000.	1103.	6.929	1.742	.031
16000.	1074.	6.751	1.496	.196
18000.	1052.	6.102	1.129	.026
20000.	1014.	4.540	.823	.061
22000.	986.	2.958	.598	.068
24000.	952.	2.236	.438	.021
26000.	905.	1.711	.327	.012
28000.	868.	1.370	.241	.006
30000.	751.	.923	.168	.003
32000.	447.	.535	.128	.004
34000.	270.	.347	.072	.002
36000.	108.	.221	.035	.001
38000.	39.	.119	.022	.001
40000.	13.	.034	.011	.001
42000.	2.	.023	.012	.001
44000.	1.	.015	.015	.015
46000.	1.	.010	.010	.010
48000.	1.	.007	.007	.007
50000.	1.	.005	.005	.005

TABLE XIX
MEAN AND EXTREME WINTER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
SELECTED LEVELS BY SEASONS
STATION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	WINTER		
		MAXIMUM	MEAN	MINIMUM
4940.- 6000.	869.	.198	.082	.014
6000.- 8000.	1056.	.368	.130	.028
8000.- 10000.	1063.	.270	.102	.016
10000.- 12000.	1057.	.282	.076	.011
12000.- 14000.	1054.	.235	.055	.006
14000.- 16000.	1044.	.160	.040	.003
16000.- 18000.	1036.	.145	.028	.004
18000.- 20000.	987.	.107	.021	.003
20000.- 22000.	941.	.071	.015	.001
22000.- 24000.	887.	.044	.010	.001
24000.- 26000.	821.	.030	.007	.001
26000.- 28000.	703.	.020	.005	.000
28000.- 30000.	504.	.013	.003	.000
30000.- 32000.	237.	.008	.002	.000
32000.- 34000.	101.	.005	.001	.000
34000.- 36000.	25.	.002	.001	.000
36000.- 38000.	6.	.000	.000	.000
38000.- 40000.	1.	.000	.000	.000
40000.- 42000.	0.	.000	.000	.000
42000.- 44000.	0.	.000	.000	.000
44000.- 46000.	0.	.000	.000	.000
46000.- 48000.	0.	.000	.000	.000
48000.- 50000.	0.	.000	.000	.000

TABLE XIX (CONT)
 MEAN AND EXTREME UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SPRING		
		MAXIMUM	MEAN	MINIMUM
4400.- 6000.	1111.	.298	.109	.023
6000.- 8000.	1374.	.462	.165	.041
8000.- 10000.	1374.	.392	.130	.029
10000.- 12000.	1562.	.311	.099	.019
12000.- 14000.	1359.	.236	.073	.009
14000.- 16000.	1354.	.175	.053	.006
16000.- 18000.	1341.	.142	.037	.003
18000.- 20000.	1277.	.106	.025	.002
20000.- 22000.	1215.	.075	.017	.001
22000.- 24000.	1163.	.044	.012	.001
24000.- 26000.	1088.	.036	.008	.001
26000.- 28000.	937.	.022	.005	.000
28000.- 30000.	800.	.013	.003	.000
30000.- 32000.	479.	.010	.002	.000
32000.- 34000.	237.	.005	.001	.000
34000.- 36000.	70.	.002	.001	.000
36000.- 38000.	20.	.001	.000	.000
38000.- 40000.	5.	.001	.000	.000
40000.- 42000.	3.	.001	.001	.000
42000.- 44000.	3.	.001	.000	.000
44000.- 46000.	2.	.001	.000	.000
46000.- 48000.	2.	.000	.000	.000
48000.- 50000.	2.	.000	.000	.000

TABLE XIX (CONT)
 MEAN AND EXTREMAL UPPER AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973
 SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	MINIMUM
4900.- 6000.	826.	.443	.258	.041
6000.- 6900.	914.	.747	.389	.085
6900.- 10000.	914.	.639	.314	.068
10000.- 12000.	912.	.508	.249	.051
12000.- 14000.	913.	.493	.192	.036
14000.- 16000.	911.	.316	.144	.008
16000.- 18000.	994.	.247	.104	.006
18000.- 20000.	882.	.201	.071	.007
20000.- 22000.	851.	.199	.047	.004
22000.- 24000.	837.	.119	.031	.005
24000.- 26000.	814.	.084	.020	.001
26000.- 28000.	804.	.056	.013	.002
28000.- 30000.	780.	.033	.009	.001
30000.- 32000.	674.	.014	.006	.001
32000.- 34000.	579.	.013	.004	.000
34000.- 36000.	389.	.007	.002	.000
36000.- 38000.	235.	.004	.001	.000
38000.- 40000.	137.	.002	.001	.000
40000.- 42000.	67.	.001	.000	.000
42000.- 44000.	42.	.001	.000	.000
44000.- 46000.	30.	.001	.000	.000
46000.- 48000.	35.	.000	.000	.000
48000.- 50000.	35.	.000	.000	.000

TABLE XIX (CONT)
 MEAN AND EXTREME MONTHLY AIR PRECIPITABLE WATER (CENTIMETERS) BETWEEN
 SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
4940.- - 5000.	806.	.414	.169	.043
6000.- - 6000.	961.	.661	.254	.059
8000.- - 10000.	960.	.557	.201	.027
10000.- - 12000.	855.	.425	.153	.023
12000.- - 14000.	845.	.347	.112	.016
14000.- - 16000.	941.	.284	.078	.007
16000.- - 18000.	435.	.219	.053	.007
18000.- - 20000.	921.	.170	.036	.003
20000.- - 22000.	887.	.129	.025	.004
22000.- - 24000.	861.	.084	.018	.003
24000.- - 26000.	815.	.064	.012	.001
26000.- - 28000.	795.	.044	.008	.001
28000.- - 30000.	726.	.030	.006	.001
30000.- - 32000.	527.	.019	.004	.001
32000.- - 34000.	373.	.011	.003	.000
34000.- - 36000.	185.	.006	.001	.000
36000.- - 38000.	66.	.004	.001	.000
38000.- - 40000.	21.	.001	.000	.000
40000.- - 42000.	3.	.001	.000	.000
42000.- - 44000.	1.	.000	.000	.000
44000.- - 46000.	1.	.000	.000	.000
46000.- - 48000.	1.	.000	.000	.000
48000.- - 50000.	1.	.000	.000	.000

TABLE XX
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE ASL FEET	TOTAL OBSERVATIONS	WINTER		
		MAXIMUM	MEAN	MINIMUM
4940.	959.	99.	45.	9.
5000.	1166.	99.	42.	5.
6000.	1167.	99.	38.	4.
7000.	1165.	99.	38.	10.
8000.	1162.	99.	37.	5.
9000.	1157.	100.	37.	2.
10000.	1145.	100.	37.	1.
11000.	1137.	100.	36.	1.
12000.	1128.	100.	34.	2.
13000.	1121.	100.	33.	1.
14000.	1114.	99.	31.	1.
15000.	1100.	99.	30.	1.
16000.	1095.	99.	30.	2.
18000.	1091.	99.	29.	1.
20000.	1047.	99.	29.	1.
22000.	1017.	99.	30.	1.
24000.	967.	99.	29.	1.
26000.	852.	99.	28.	1.
27000.	799.	96.	26.	1.
30000.	456.	79.	21.	1.
32000.	215.	71.	19.	1.
34000.	92.	47.	12.	1.
36000.	22.	25.	11.	1.
38000.	5.	14.	6.	1.
40000.	1.	2.	2.	2.
42000.	0.	0.	0.	0.
44000.	0.	0.	0.	0.
46000.	0.	0.	0.	0.
48000.	0.	0.	0.	0.
50000.	0.	0.	0.	0.

TABLE XX (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1901-1973

GEOMETRIC ALTITUDE MSL FEET	SPRING			MEAN	MINIMUM
	TOTAL OBSERVATIONS	MAXIMUM			
4940.	1141.	99.	29.	4.	
5000.	1400.	99.	29.	1.	
5000.	1365.	99.	28.	1.	
7000.	1305.	100.	30.	1.	
8000.	1373.	100.	31.	1.	
9000.	1373.	100.	32.	1.	
10000.	1376.	99.	33.	1.	
11000.	1367.	99.	33.	1.	
12000.	1356.	99.	33.	1.	
13000.	1350.	99.	33.	1.	
14000.	1353.	99.	33.	1.	
15000.	1323.	99.	32.	1.	
16000.	1313.	99.	32.	1.	
18000.	1281.	100.	30.	1.	
20000.	1231.	99.	30.	1.	
22000.	1176.	99.	28.	1.	
24000.	1127.	95.	28.	1.	
26000.	1024.	80.	27.	1.	
28000.	880.	70.	25.	1.	
30000.	659.	72.	21.	1.	
32000.	357.	64.	17.	1.	
34000.	173.	49.	11.	1.	
36000.	54.	31.	8.	1.	
38000.	15.	25.	8.	1.	
40000.	5.	36.	21.	8.	
42000.	4.	25.	20.	14.	
44000.	4.	25.	18.	15.	
46000.	3.	25.	16.	7.	
48000.	2.	25.	20.	15.	
50000.	2.	25.	20.	15.	

TABLE XX (CONT.)
MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
AT SELECTED LEVELS BY SEASONS
STATION SITE
PERIOD OF RECORD 1921-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	SUMMER		
		MAXIMUM	MEAN	MINIMUM
4900.	904.	95.	40.	3.
5000.	921.	95.	39.	3.
6000.	938.	93.	36.	1.
7000.	958.	94.	37.	1.
8000.	981.	96.	38.	3.
9000.	993.	94.	40.	5.
10000.	993.	95.	41.	7.
11000.	995.	97.	42.	3.
12000.	995.	99.	43.	1.
13000.	995.	98.	44.	3.
14000.	994.	98.	44.	4.
15000.	997.	98.	45.	1.
16000.	995.	99.	44.	1.
19000.	993.	99.	42.	1.
20000.	925.	100.	38.	2.
22000.	846.	99.	32.	1.
24000.	848.	96.	29.	1.
26000.	814.	86.	27.	1.
28000.	796.	90.	25.	1.
30000.	767.	76.	24.	1.
32000.	634.	79.	23.	1.
34000.	496.	71.	21.	1.
35000.	292.	61.	14.	1.
36000.	170.	47.	12.	1.
40000.	102.	35.	12.	1.
42000.	55.	29.	17.	1.
44000.	40.	28.	20.	1.
45000.	37.	30.	21.	14.
49000.	36.	29.	21.	15.
50000.	36.	30.	21.	15.

TABLE XX (CONT)
 MEAN AND EXTREME UPPER AIR RELATIVE HUMIDITIES (PER CENT)
 AT SELECTED LEVELS BY SEASONS
 STATION SITE
 PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	FALL		
		MAXIMUM	MEAN	MINIMUM
4940.	638.	96.	41.	9.
5000.	1040.	94.	40.	10.
5000.	1046.	92.	37.	7.
7000.	1090.	99.	38.	3.
8000.	1042.	100.	38.	10.
9000.	1093.	100.	38.	6.
10000.	1044.	99.	39.	8.
11000.	1077.	99.	38.	1.
12000.	1045.	99.	37.	3.
13000.	1049.	99.	36.	1.
14000.	1035.	99.	34.	1.
15000.	1010.	99.	32.	1.
16000.	987.	100.	31.	5.
18000.	962.	99.	29.	1.
20000.	929.	99.	26.	2.
22000.	898.	98.	25.	2.
24000.	867.	100.	25.	2.
25000.	824.	97.	25.	1.
28000.	791.	84.	25.	1.
30000.	677.	80.	23.	1.
32000.	396.	65.	22.	1.
34000.	225.	65.	16.	1.
36000.	49.	30.	9.	1.
38000.	33.	13.	6.	1.
40000.	10.	13.	4.	1.
42000.	2.	14.	8.	1.
46000.	1.	14.	14.	14.
46000.	1.	14.	14.	14.
48000.	1.	15.	15.	15.
50000.	1.	15.	15.	15.

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR INDEX OF REFRACTION DATA

By Months

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By Months

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TABLE XXI
MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
STATION SITE
PERIOD OF RECORD 1901-1973

JANUARY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	350.	1.000275	1.000254	.000000	1.000237
5000.	417.	1.000280	1.000253	-.000001	1.000233
6000.	418.	1.000265	1.000243	-.000011	1.000232
7000.	417.	1.000259	1.000234	-.000009	1.000225
8000.	417.	1.000246	1.000225	-.000009	1.000217
9000.	418.	1.000238	1.000216	-.000008	1.000204
10000.	417.	1.000228	1.000209	-.000008	1.000197
11000.	419.	1.000218	1.000201	-.000008	1.000190
12000.	419.	1.000210	1.000194	-.000007	1.000184
13000.	418.	1.000201	1.000187	-.000007	1.000178
14000.	418.	1.000194	1.000180	-.000007	1.000172
15000.	416.	1.000188	1.000174	-.000006	1.000167
16000.	415.	1.000182	1.000168	-.000006	1.000162
18000.	410.	1.000167	1.000156	-.000012	1.000152
20000.	393.	1.000154	1.000146	-.000010	1.000143
25000.	359.	1.000127	1.000123	-.000023	1.000121
30000.	325.	1.000106	1.000103	-.000020	1.000097
35000.	260.	1.000089	1.000086	-.000018	1.000078
40000.	235.	1.000074	1.000069	-.000017	1.000063
45000.	207.	1.000061	1.000054	-.000015	1.000050
50000.	178.	1.000047	1.000043	-.000011	1.000040
55000.	153.	1.000037	1.000034	-.000009	1.000032
60000.	140.	1.000029	1.000026	-.000007	1.000025
65000.	150.	1.000022	1.000020	-.000006	1.000020
70000.	122.	1.000017	1.000016	-.000005	1.000015
75000.	115.	1.000013	1.000012	-.000003	1.000012
80000.	102.	1.000010	1.000009	-.000003	1.000009
85000.	98.	1.000008	1.000007	-.000002	1.000007
90000.	86.	1.000006	1.000006	-.000002	1.000005
95000.	82.	1.000005	1.000005	-.000001	1.000004
100000.	83.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

FEBRUARY

GEOMETRIC ALTITUDE GSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	366.	1.000295	1.000253	.000000	1.000233
5000.	473.	1.000284	1.000251	-.000002	1.000228
6000.	473.	1.000270	1.000241	-.000010	1.000225
7000.	475.	1.000257	1.000234	-.000008	1.000221
8000.	470.	1.000246	1.000225	-.000008	1.000216
9000.	470.	1.000236	1.000217	-.000008	1.000206
10000.	470.	1.000228	1.000210	-.000008	1.000198
11000.	469.	1.000218	1.000202	-.000008	1.000191
12000.	468.	1.000211	1.000194	-.000007	1.000186
13000.	468.	1.000203	1.000187	-.000007	1.000180
14000.	466.	1.000196	1.000180	-.000007	1.000174
15000.	464.	1.000190	1.000174	-.000006	1.000169
16000.	466.	1.000182	1.000168	-.000006	1.000164
18000.	461.	1.000168	1.000157	-.000012	1.000154
20000.	450.	1.000154	1.000147	-.000010	1.000143
25000.	404.	1.000127	1.000123	-.000023	1.000119
30000.	358.	1.000106	1.000103	-.000020	1.000099
35000.	280.	1.000089	1.000085	-.000018	1.000079
40000.	250.	1.000074	1.000068	-.000017	1.000062
45000.	221.	1.000059	1.000053	-.000014	1.000050
50000.	192.	1.000047	1.000043	-.000010	1.000039
55000.	158.	1.000037	1.000034	-.000009	1.000031
60000.	143.	1.000029	1.000026	-.000007	1.000025
65000.	124.	1.000022	1.000020	-.000006	1.000019
70000.	103.	1.000017	1.000016	-.000005	1.000015
75000.	96.	1.000013	1.000012	-.000003	1.000012
80000.	88.	1.000010	1.000009	-.000003	1.000009
85000.	87.	1.000008	1.000007	-.000002	1.000007
90000.	85.	1.000006	1.000006	-.000002	1.000005
95000.	79.	1.000005	1.000005	-.000001	1.000004
100000.	62.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 FLAM AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

MARCH

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	348.	1.000282	1.000249	.000000	1.000229
5000.	441.	1.000241	1.000248	-.000001	1.000229
6000.	443.	1.000265	1.000239	-.000009	1.000221
7000.	443.	1.000257	1.000231	-.000008	1.000215
8000.	442.	1.000246	1.000223	-.000008	1.000210
9000.	441.	1.000236	1.000216	-.000007	1.000203
10000.	480.	1.000227	1.000209	-.000007	1.000195
11000.	476.	1.000217	1.000201	-.000008	1.000190
12000.	474.	1.000208	1.000194	-.000007	1.000185
13000.	474.	1.000200	1.000187	-.000007	1.000181
14000.	472.	1.000191	1.000180	-.000007	1.000175
15000.	472.	1.000185	1.000174	-.000006	1.000169
16000.	471.	1.000178	1.000168	-.000006	1.000163
18000.	471.	1.000167	1.000157	-.000012	1.000153
20000.	462.	1.000154	1.000146	-.000010	1.000143
25000.	410.	1.000127	1.000123	-.000024	1.000119
30000.	348.	1.000106	1.000103	-.000020	1.000097
35000.	257.	1.000089	1.000065	-.000018	1.000078
40000.	208.	1.000074	1.000068	-.000017	1.000063
45000.	183.	1.000059	1.000053	-.000015	1.000050
50000.	159.	1.000047	1.000043	-.000011	1.000040
55000.	134.	1.000037	1.000034	-.000009	1.000032
60000.	116.	1.000028	1.000026	-.000007	1.000025
65000.	100.	1.000022	1.000020	-.000006	1.000020
70000.	96.	1.000017	1.000016	-.000005	1.000015
75000.	47.	1.000013	1.000012	-.000003	1.000012
80000.	80.	1.000010	1.000009	-.000003	1.000009
85000.	77.	1.000008	1.000008	-.000002	1.000007
90000.	56.	1.000006	1.000006	-.000002	1.000005
95000.	51.	1.000005	1.000005	-.000001	1.000004
100000.	47.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

APRIL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	416.	1.000284	1.000247	.000000	1.000221
5000.	534.	1.000283	1.000245	-.000001	1.000219
6000.	534.	1.000270	1.000237	-.000002	1.000216
7000.	533.	1.000256	1.000229	-.000008	1.000210
8000.	531.	1.000248	1.000222	-.000007	1.000205
9000.	533.	1.000237	1.000215	-.000007	1.000200
10000.	533.	1.000227	1.000207	-.000007	1.000194
11000.	533.	1.000218	1.000200	-.000007	1.000188
12000.	532.	1.000209	1.000193	-.000007	1.000184
13000.	532.	1.000202	1.000186	-.000007	1.000178
14000.	532.	1.000194	1.000180	-.000007	1.000172
15000.	532.	1.000187	1.000174	-.000006	1.000166
16000.	531.	1.000180	1.000168	-.000006	1.000161
17000.	525.	1.000165	1.000156	-.000012	1.000151
20000.	501.	1.000153	1.000146	-.000010	1.000142
25000.	455.	1.000127	1.000123	-.000023	1.000121
30000.	414.	1.000106	1.000103	-.000019	1.000098
35000.	285.	1.000089	1.000086	-.000017	1.000080
40000.	250.	1.000074	1.000070	-.000016	1.000064
45000.	202.	1.000060	1.000055	-.000015	1.000052
50000.	183.	1.000046	1.000043	-.000011	1.000041
55000.	154.	1.000037	1.000034	-.000010	1.000032
60000.	138.	1.000029	1.000027	-.000007	1.000026
65000.	129.	1.000022	1.000021	-.000006	1.000020
70000.	121.	1.000017	1.000016	-.000005	1.000015
75000.	115.	1.000013	1.000012	-.000003	1.000012
80000.	100.	1.000010	1.000010	-.000003	1.000009
85000.	101.	1.000008	1.000008	-.000002	1.000007
90000.	97.	1.000006	1.000006	-.000002	1.000005
95000.	88.	1.000005	1.000005	-.000001	1.000004
100000.	67.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STATION, SITE
 PERIOD OF RECORD 1961-1973

MAY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	413.	1.000293	1.000250	.000000	1.000225
5000.	462.	1.000290	1.000249	-.000001	1.000225
6000.	462.	1.000271	1.000239	-.000010	1.000214
7000.	462.	1.000263	1.000231	-.000008	1.000207
8000.	462.	1.000254	1.000223	-.000008	1.000202
9000.	462.	1.000245	1.000216	-.000007	1.000197
10000.	462.	1.000235	1.000208	-.000007	1.000193
11000.	462.	1.000227	1.000201	-.000007	1.000188
12000.	462.	1.000221	1.000194	-.000007	1.000183
13000.	455.	1.000212	1.000188	-.000007	1.000178
14000.	453.	1.000203	1.000181	-.000007	1.000172
15000.	450.	1.000195	1.000175	-.000006	1.000167
16000.	449.	1.000187	1.000169	-.000006	1.000162
18000.	445.	1.000172	1.000157	-.000012	1.000152
20000.	434.	1.000158	1.000147	-.000010	1.000143
25000.	410.	1.000127	1.000123	-.000024	1.000120
30000.	381.	1.000106	1.000104	-.000019	1.000101
35000.	259.	1.000089	1.000087	-.000017	1.000083
40000.	218.	1.000074	1.000071	-.000016	1.000067
45000.	205.	1.000061	1.000056	-.000015	1.000053
50000.	181.	1.000047	1.000045	-.000011	1.000042
55000.	146.	1.000037	1.000035	-.000010	1.000033
60000.	136.	1.000029	1.000027	-.000008	1.000026
65000.	122.	1.000022	1.000021	-.000006	1.000020
70000.	112.	1.000017	1.000016	-.000005	1.000016
75000.	105.	1.000013	1.000013	-.000003	1.000012
80000.	102.	1.000010	1.000010	-.000003	1.000009
85000.	98.	1.000008	1.000008	-.000002	1.000007
90000.	95.	1.000006	1.000006	-.000002	1.000006
95000.	86.	1.000005	1.000005	-.000001	1.000004
100000.	68.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MAX AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

JUNE

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	320.	1.000301	1.000256	.000000	1.000220
5000.	351.	1.000297	1.000254	-.000002	1.000221
6000.	352.	1.000285	1.000243	-.000011	1.000211
7000.	351.	1.000274	1.000235	-.000008	1.000205
8000.	352.	1.000266	1.000227	-.000008	1.000200
9000.	351.	1.000257	1.000219	-.000008	1.000195
10000.	352.	1.000241	1.000211	-.000008	1.000190
11000.	349.	1.000234	1.000204	-.000007	1.000185
12000.	351.	1.000224	1.000197	-.000007	1.000180
13000.	349.	1.000213	1.000190	-.000007	1.000175
14000.	348.	1.000205	1.000183	-.000007	1.000171
15000.	346.	1.000199	1.000177	-.000006	1.000165
16000.	347.	1.000192	1.000170	-.000006	1.000160
18000.	344.	1.000177	1.000158	-.000012	1.000150
20000.	338.	1.000162	1.000147	-.000011	1.000141
25000.	317.	1.000127	1.000123	-.000024	1.000120
30000.	296.	1.000106	1.000104	-.000019	1.000102
35000.	221.	1.000089	1.000087	-.000017	1.000085
40000.	165.	1.000074	1.000072	-.000015	1.000069
45000.	150.	1.000062	1.000058	-.000014	1.000055
50000.	143.	1.000050	1.000046	-.000011	1.000044
55000.	120.	1.000039	1.000036	-.000010	1.000035
60000.	121.	1.000030	1.000028	-.000008	1.000027
65000.	102.	1.000023	1.000021	-.000006	1.000021
70000.	97.	1.000018	1.000016	-.000005	1.000016
75000.	92.	1.000014	1.000013	-.000004	1.000012
80000.	91.	1.000011	1.000010	-.000003	1.000009
85000.	86.	1.000008	1.000008	-.000002	1.000007
90000.	81.	1.000007	1.000006	-.000002	1.000006
95000.	70.	1.000005	1.000004	-.000001	1.000004
100000.	60.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

JULY

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4000.	310.	1.000333	1.000279	.000000	1.000239
5000.	349.	1.000319	1.000276	-.000003	1.000232
6000.	348.	1.000291	1.000260	-.000016	1.000222
7000.	348.	1.000285	1.000250	-.000010	1.000207
8000.	350.	1.000280	1.000241	-.000010	1.000205
9000.	350.	1.000258	1.000232	-.000009	1.000199
10000.	340.	1.000248	1.000223	-.000009	1.000199
11000.	354.	1.000238	1.000214	-.000009	1.000192
12000.	354.	1.000228	1.000206	-.000008	1.000187
13000.	354.	1.000218	1.000198	-.000008	1.000180
14000.	354.	1.000208	1.000191	-.000007	1.000175
15000.	353.	1.000199	1.000183	-.000007	1.000169
16000.	352.	1.000191	1.000176	-.000007	1.000164
18000.	350.	1.000175	1.000162	-.000014	1.000151
20000.	344.	1.000161	1.000150	-.000013	1.000142
25000.	317.	1.000130	1.000123	-.000027	1.000120
30000.	297.	1.000106	1.000103	-.000020	1.000102
35000.	250.	1.000098	1.000087	-.000017	1.000086
40000.	178.	1.000074	1.000073	-.000014	1.000072
45000.	155.	1.000061	1.000060	-.000013	1.000059
50000.	147.	1.000050	1.000048	-.000011	1.000047
55000.	134.	1.000039	1.000037	-.000011	1.000037
60000.	125.	1.000030	1.000028	-.000009	1.000027
65000.	114.	1.000022	1.000022	-.000007	1.000022
70000.	110.	1.000017	1.000017	-.000005	1.000017
75000.	107.	1.000014	1.000013	-.000004	1.000013
80000.	106.	1.000011	1.000010	-.000003	1.000010
85000.	102.	1.000008	1.000008	-.000002	1.000008
90000.	97.	1.000007	1.000006	-.000002	1.000006
95000.	92.	1.000005	1.000005	-.000001	1.000005
100000.	85.	1.000004	1.000004	-.000001	1.000004

TABLE XXI (CONT)
LOW AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
STATION SITE
PERIOD OF RECORD 1951-1973

AUGUST

GEODETIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	365.	1.000313	1.000277	.000000	1.000236
5000.	344.	1.000311	1.000276	-.000001	1.000234
5000.	344.	1.000297	1.000259	-.000017	1.000209
7000.	345.	1.000279	1.000249	-.000010	1.000204
8000.	345.	1.000268	1.000240	-.000009	1.000201
9000.	345.	1.000260	1.000232	-.000008	1.000201
10000.	344.	1.000250	1.000223	-.000008	1.000199
11000.	344.	1.000239	1.000215	-.000009	1.000196
12000.	344.	1.000226	1.000207	-.000008	1.000187
13000.	345.	1.000217	1.000199	-.000008	1.000180
14000.	345.	1.000207	1.000191	-.000008	1.000173
15000.	344.	1.000201	1.000183	-.000008	1.000166
16000.	332.	1.000192	1.000175	-.000007	1.000161
18000.	378.	1.000175	1.000161	-.000014	1.000152
20000.	375.	1.000160	1.000149	-.000013	1.000142
25000.	354.	1.000130	1.000123	-.000026	1.000120
30000.	344.	1.000106	1.000103	-.000019	1.000101
35000.	234.	1.000089	1.000087	-.000017	1.000086
40000.	215.	1.000074	1.000072	-.000014	1.000071
45000.	141.	1.000061	1.000059	-.000013	1.000058
50000.	177.	1.000050	1.000048	-.000011	1.000046
55000.	162.	1.000040	1.000037	-.000011	1.000036
60000.	145.	1.000030	1.000028	-.000009	1.000027
65000.	147.	1.000023	1.000022	-.000007	1.000021
70000.	137.	1.000017	1.000016	-.000005	1.000016
75000.	130.	1.000014	1.000013	-.000004	1.000012
80000.	124.	1.000011	1.000010	-.000003	1.000010
85000.	120.	1.000008	1.000008	-.000002	1.000007
90000.	104.	1.000007	1.000006	-.000002	1.000006
95000.	94.	1.000005	1.000005	-.000001	1.000004
100000.	52.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

SEPTEMBER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	320.	1.000306	1.000273	.000000	1.000236
5000.	362.	1.000308	1.000269	-.000003	1.000235
6000.	361.	1.000290	1.000255	-.000014	1.000226
7000.	362.	1.000280	1.000246	-.000009	1.000219
8000.	362.	1.000272	1.000237	-.000009	1.000214
9000.	363.	1.000262	1.000228	-.000009	1.000207
10000.	362.	1.000245	1.000220	-.000009	1.000198
11000.	363.	1.000240	1.000211	-.000009	1.000190
12000.	363.	1.000234	1.000203	-.000008	1.000183
13000.	363.	1.000218	1.000194	-.000008	1.000176
14000.	363.	1.000206	1.000187	-.000008	1.000170
15000.	361.	1.000199	1.000179	-.000008	1.000165
16000.	361.	1.000192	1.000171	-.000007	1.000160
18000.	361.	1.000177	1.000158	-.000013	1.000149
20000.	359.	1.000160	1.000146	-.000012	1.000141
25000.	345.	1.000128	1.000122	-.000024	1.000120
30000.	323.	1.000106	1.000103	-.000019	1.000100
35000.	250.	1.000088	1.000086	-.000017	1.000083
40000.	202.	1.000074	1.000071	-.000015	1.000067
45000.	188.	1.000061	1.000058	-.000013	1.000054
50000.	181.	1.000050	1.000047	-.000011	1.000044
55000.	159.	1.000039	1.000036	-.000011	1.000034
60000.	147.	1.000029	1.000028	-.000009	1.000027
65000.	138.	1.000022	1.000021	-.000006	1.000020
70000.	128.	1.000017	1.000016	-.000005	1.000016
75000.	124.	1.000014	1.000013	-.000004	1.000012
80000.	121.	1.000010	1.000010	-.000003	1.000010
85000.	115.	1.000008	1.000008	-.000002	1.000007
90000.	105.	1.000006	1.000006	-.000002	1.000006
95000.	91.	1.000005	1.000005	-.000001	1.000004
100000.	80.	1.000004	1.000004	-.000001	1.000003

TABLE XXI (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY MONTHS
 STATION SITE
 PERIOD OF RECORD 1961-1973

OCTOBER

GEOMETRIC ALTITUDE ASL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	367.	1.000302	1.000258	.000000	1.000234
5000.	417.	1.000299	1.000257	-.000001	1.000234
6000.	417.	1.000283	1.000245	-.000011	1.000217
7000.	416.	1.000281	1.000237	-.000009	1.000214
8000.	417.	1.000268	1.000228	-.000009	1.000208
9000.	418.	1.000253	1.000220	-.000008	1.000203
10000.	418.	1.000243	1.000212	-.000003	1.000197
11000.	418.	1.000234	1.000203	-.000008	1.000189
12000.	418.	1.000225	1.000196	-.000008	1.000181
13000.	418.	1.000216	1.000188	-.000008	1.000175
14000.	417.	1.000207	1.000180	-.000007	1.000170
15000.	415.	1.000197	1.000174	-.000007	1.000165
16000.	414.	1.000187	1.000167	-.000007	1.000160
18000.	413.	1.000173	1.000155	-.000012	1.000150
20000.	410.	1.000159	1.000145	-.000010	1.000141
25000.	388.	1.000128	1.000123	-.000023	1.000119
30000.	362.	1.000106	1.000104	-.000019	1.000099
35000.	290.	1.000089	1.000087	-.000017	1.000084
40000.	242.	1.000074	1.000071	-.000015	1.000067
45000.	208.	1.000061	1.000057	-.000014	1.000056
50000.	204.	1.000049	1.000046	-.000011	1.000044
55000.	182.	1.000038	1.000036	-.000010	1.000035
60000.	176.	1.000029	1.000027	-.000008	1.000027
65000.	167.	1.000022	1.000021	-.000006	1.000021
70000.	161.	1.000017	1.000016	-.000005	1.000016
75000.	153.	1.000013	1.000012	-.000003	1.000012
80000.	146.	1.000010	1.000010	-.000003	1.000010
85000.	136.	1.000008	1.000008	-.000002	1.000008
90000.	125.	1.000006	1.000006	-.000002	1.000006
95000.	110.	1.000005	1.000005	-.000001	1.000005
100000.	97.	1.000004	1.000004	-.000001	1.000004

TABLE XXI (CONT)
MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOGRAPHIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	NOVEMBER			GRADIENT	MINIMUM
		MAXIMUM	MEAN			
4940.	348.	1.000282	1.000255		.000000	1.000233
5000.	407.	1.000279	1.000254		-.000001	1.000233
6000.	407.	1.000266	1.000244		-.000010	1.000227
7000.	407.	1.000263	1.000235		-.000008	1.000221
8000.	408.	1.000257	1.000227		-.000008	1.000214
9000.	407.	1.000243	1.000218		-.000009	1.000205
10000.	407.	1.000232	1.000210		-.000008	1.000197
11000.	497.	1.000223	1.000202		-.000008	1.000190
12000.	404.	1.000215	1.000194		-.000008	1.000184
13000.	403.	1.000205	1.000187		-.000007	1.000178
14000.	403.	1.000198	1.000180		-.000007	1.000172
15000.	402.	1.000193	1.000173		-.000006	1.000167
16000.	402.	1.000185	1.000167		-.000006	1.000162
18000.	401.	1.000170	1.000156		-.000011	1.000152
20000.	390.	1.000156	1.000146		-.000010	1.000142
25000.	344.	1.000128	1.000123		-.000023	1.000120
30000.	310.	1.000107	1.000103		-.000020	1.000098
35000.	243.	1.000089	1.000086		-.000017	1.000079
40000.	184.	1.000075	1.000070		-.000016	1.000066
45000.	166.	1.000061	1.000056		-.000014	1.000053
50000.	152.	1.000049	1.000045		-.000011	1.000042
55000.	129.	1.000038	1.000035		-.000010	1.000033
60000.	118.	1.000029	1.000027		-.000008	1.000026
65000.	113.	1.000022	1.000021		-.000006	1.000020
70000.	109.	1.000017	1.000016		-.000005	1.000016
75000.	102.	1.000013	1.000013		-.000003	1.000012
80000.	98.	1.000010	1.000010		-.000003	1.000009
85000.	93.	1.000008	1.000008		-.000002	1.000007
90000.	85.	1.000006	1.000006		-.000002	1.000006
95000.	69.	1.000005	1.000005		-.000001	1.000005
100000.	52.	1.000004	1.000004		-.000001	1.000004

TABLE XXI (CONT)
MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY MONTHS
STALLION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	DECEMBER			
		MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	247.	1.000281	1.000256	.000000	1.000241
5000.	320.	1.000279	1.000254	-.000002	1.000238
6000.	629.	1.000270	1.000244	-.000010	1.000226
7000.	320.	1.000262	1.000235	-.000009	1.000217
8000.	329.	1.000250	1.000226	-.000009	1.000208
9000.	320.	1.000239	1.000217	-.000009	1.000201
10000.	329.	1.000232	1.000209	-.000008	1.000196
11000.	329.	1.000221	1.000201	-.000008	1.000190
12000.	329.	1.000215	1.000194	-.000007	1.000184
13000.	329.	1.000207	1.000187	-.000007	1.000179
14000.	328.	1.000195	1.000180	-.000007	1.000172
15000.	325.	1.000187	1.000173	-.000006	1.000167
16000.	328.	1.000180	1.000168	-.000006	1.000162
18000.	326.	1.000165	1.000156	-.000011	1.000152
20000.	321.	1.000153	1.000146	-.000010	1.000143
25000.	303.	1.000127	1.000123	-.000023	1.000118
30000.	263.	1.000106	1.000103	-.000020	1.000098
35000.	206.	1.000090	1.000086	-.000018	1.000080
40000.	177.	1.000074	1.000069	-.000017	1.000064
45000.	154.	1.000059	1.000055	-.000014	1.000051
50000.	144.	1.000046	1.000044	-.000011	1.000040
55000.	124.	1.000036	1.000034	-.000010	1.000032
60000.	123.	1.000028	1.000027	-.000007	1.000025
65000.	119.	1.000022	1.000021	-.000006	1.000019
70000.	111.	1.000017	1.000016	-.000005	1.000015
75000.	110.	1.000013	1.000012	-.000003	1.000012
80000.	107.	1.000010	1.000009	-.000003	1.000009
85000.	105.	1.000008	1.000007	-.000002	1.000007
90000.	100.	1.000006	1.000006	-.000002	1.000005
95000.	93.	1.000005	1.000005	-.000001	1.000004
100000.	77.	1.000004	1.000004	-.000001	1.000003

TABLE XXII
MEAN AND EXTREME UPPER AIR INDICES OF REFRACTION
AT SELECTED LEVELS BY STATIONS
STATION SITE
PERIOD OF RECORD 1961-1973

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	1713.	1.000285	1.000254	.000000	1.000233
5000.	1218.	1.000284	1.000253	-.000002	1.000228
6000.	1220.	1.000270	1.000243	-.000010	1.000225
7000.	1210.	1.000262	1.000234	-.000008	1.000217
8000.	1216.	1.000250	1.000225	-.000009	1.000208
9000.	1217.	1.000239	1.000217	-.000006	1.000201
10000.	1216.	1.000232	1.000209	-.000008	1.000196
11000.	1217.	1.000221	1.000201	-.000008	1.000190
12000.	1215.	1.000215	1.000194	-.000007	1.000184
13000.	1215.	1.000207	1.000187	-.000007	1.000178
14000.	1212.	1.000196	1.000180	-.000007	1.000172
15000.	1208.	1.000190	1.000174	-.000006	1.000167
16000.	1200.	1.000182	1.000168	-.000006	1.000162
18000.	1197.	1.000168	1.000156	-.000012	1.000152
20000.	1164.	1.000154	1.000146	-.000010	1.000143
25000.	1066.	1.000127	1.000123	-.000023	1.000118
30000.	946.	1.000106	1.000103	-.000020	1.000097
35000.	746.	1.000090	1.000085	-.000018	1.000078
40000.	662.	1.000074	1.000068	-.000017	1.000062
45000.	582.	1.000061	1.000054	-.000014	1.000050
50000.	514.	1.000047	1.000043	-.000011	1.000039
55000.	435.	1.000037	1.000034	-.000009	1.000031
60000.	406.	1.000029	1.000026	-.000007	1.000025
65000.	373.	1.000022	1.000020	-.000006	1.000019
70000.	336.	1.000017	1.000016	-.000005	1.000015
75000.	321.	1.000013	1.000012	-.000003	1.000012
80000.	297.	1.000010	1.000009	-.000003	1.000009
85000.	290.	1.000008	1.000007	-.000002	1.000007
90000.	269.	1.000006	1.000006	-.000002	1.000005
95000.	254.	1.000005	1.000005	-.000001	1.000004
100000.	202.	1.000004	1.000004	-.000001	1.000003

TABLE XXII (CONT)

PLAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
AT SELECTED LEVELS BY SEASONS
STATION SITE
PERIOD OF RECORD 1961-1973

SPRING

GEOMETRIC ALTITUDE IN FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
6000.	1217.	1.000293	1.000248	.000000	1.000221
5000.	1477.	1.000290	1.000247	-.000001	1.000219
6000.	1478.	1.000271	1.000238	-.000009	1.000214
7000.	1478.	1.000263	1.000230	-.000008	1.000207
8000.	1475.	1.000254	1.000223	-.000008	1.000202
9000.	1476.	1.000245	1.000215	-.000007	1.000197
10000.	1475.	1.000235	1.000208	-.000007	1.000193
11000.	1468.	1.000227	1.000201	-.000007	1.000188
12000.	1463.	1.000221	1.000194	-.000007	1.000183
13000.	1461.	1.000212	1.000187	-.000007	1.000178
14000.	1457.	1.000203	1.000180	-.000007	1.000172
15000.	1454.	1.000195	1.000174	-.000006	1.000166
16000.	1451.	1.000187	1.000168	-.000006	1.000161
17000.	1441.	1.000172	1.000156	-.000012	1.000151
20000.	1397.	1.000158	1.000146	-.000010	1.000142
25000.	1284.	1.000127	1.000123	-.000024	1.000119
30000.	1143.	1.000106	1.000103	-.000020	1.000097
35000.	801.	1.000089	1.000086	-.000017	1.000078
40000.	656.	1.000074	1.000070	-.000016	1.000063
45000.	595.	1.000061	1.000055	-.000015	1.000050
50000.	523.	1.000047	1.000044	-.000011	1.000040
55000.	434.	1.000037	1.000034	-.000010	1.000032
60000.	309.	1.000029	1.000027	-.000007	1.000025
65000.	351.	1.000022	1.000021	-.000006	1.000020
70000.	329.	1.000017	1.000016	-.000005	1.000015
75000.	307.	1.000013	1.000012	-.000003	1.000012
80000.	248.	1.000010	1.000010	-.000003	1.000009
85000.	277.	1.000008	1.000008	-.000002	1.000007
90000.	258.	1.000006	1.000006	-.000002	1.000005
95000.	235.	1.000005	1.000005	-.000001	1.000004
100000.	143.	1.000004	1.000004	-.000001	1.000003

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TABLE XXII (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

SUMMER

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	994.	1.000333	1.000271	.000000	1.000220
5000.	1084.	1.000319	1.000269	-.000002	1.000221
6000.	1084.	1.000297	1.000254	-.000015	1.000209
7000.	1084.	1.000285	1.000245	-.000009	1.000204
8000.	1087.	1.000280	1.000236	-.000009	1.000200
9000.	1086.	1.000260	1.000228	-.000008	1.000195
10000.	1085.	1.000250	1.000219	-.000008	1.000190
11000.	1087.	1.000239	1.000211	-.000008	1.000185
12000.	1089.	1.000228	1.000203	-.000008	1.000180
13000.	1088.	1.000218	1.000196	-.000008	1.000175
14000.	1087.	1.000208	1.000188	-.000007	1.000171
15000.	1083.	1.000201	1.000181	-.000007	1.000165
16000.	1081.	1.000192	1.000174	-.000007	1.000160
18000.	1072.	1.000177	1.000161	-.000013	1.000150
20000.	1057.	1.000162	1.000148	-.000012	1.000141
25000.	992.	1.000130	1.000123	-.000026	1.000120
30000.	937.	1.000106	1.000103	-.000019	1.000101
35000.	755.	1.000089	1.000087	-.000017	1.000085
40000.	558.	1.000074	1.000072	-.000014	1.000069
45000.	496.	1.000062	1.000059	-.000013	1.000055
50000.	467.	1.000050	1.000048	-.000011	1.000044
55000.	425.	1.000040	1.000037	-.000011	1.000035
60000.	401.	1.000030	1.000028	-.000009	1.000027
65000.	363.	1.000023	1.000022	-.000006	1.000021
70000.	344.	1.000018	1.000016	-.000005	1.000016
75000.	329.	1.000014	1.000013	-.000004	1.000012
80000.	321.	1.000011	1.000010	-.000003	1.000009
85000.	308.	1.000008	1.000008	-.000002	1.000007
90000.	284.	1.000007	1.000006	-.000002	1.000006
95000.	258.	1.000005	1.000005	-.000001	1.000004
100000.	227.	1.000004	1.000004	-.000001	1.000003

TABLE XXII (CONT)
 MEAN AND EXTREME UPPER AIR INDEXES OF REFRACTION
 AT SELECTED LEVELS BY SEASONS
 STALLION SITE
 PERIOD OF RECORD 1961-1973

FALL

GEOMETRIC ALTITUDE MSL FEET	TOTAL OBSERVATIONS	MAXIMUM	MEAN	GRADIENT	MINIMUM
4940.	1035.	1.000306	1.000262	.000000	1.000233
5000.	1186.	1.000308	1.000260	-.000002	1.000233
6000.	1185.	1.000290	1.000248	-.000012	1.000217
7000.	1185.	1.000281	1.000239	-.000009	1.000214
8000.	1187.	1.000272	1.000230	-.000009	1.000208
9000.	1188.	1.000262	1.000222	-.000009	1.000203
10000.	1187.	1.000245	1.000213	-.000008	1.000197
11000.	1188.	1.000240	1.000205	-.000008	1.000189
12000.	1185.	1.000234	1.000197	-.000008	1.000181
13000.	1184.	1.000218	1.000189	-.000008	1.000175
14000.	1183.	1.000207	1.000182	-.000007	1.000170
15000.	1178.	1.000199	1.000175	-.000007	1.000163
16000.	1177.	1.000192	1.000168	-.000007	1.000160
18000.	1175.	1.000177	1.000156	-.000012	1.000149
20000.	1159.	1.000160	1.000146	-.000011	1.000141
25000.	1077.	1.000128	1.000123	-.000023	1.000119
30000.	945.	1.000107	1.000103	-.000019	1.000098
35000.	783.	1.000089	1.000086	-.000017	1.000079
40000.	628.	1.000075	1.000071	-.000015	1.000066
45000.	562.	1.000061	1.000057	-.000014	1.000053
50000.	537.	1.000050	1.000046	-.000011	1.000042
55000.	470.	1.000039	1.000036	-.000010	1.000033
60000.	441.	1.000029	1.000027	-.000008	1.000026
65000.	418.	1.000022	1.000021	-.000006	1.000020
70000.	398.	1.000017	1.000016	-.000005	1.000016
75000.	379.	1.000014	1.000012	-.000003	1.000012
80000.	365.	1.000010	1.000010	-.000003	1.000009
85000.	344.	1.000008	1.000008	-.000002	1.000007
90000.	315.	1.000006	1.000006	-.000002	1.000006
95000.	270.	1.000005	1.000005	-.000001	1.000004
100000.	229.	1.000004	1.000004	-.000001	1.000003

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION I

UPPER AIR FREEZING LEVEL DATA

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FREEZING LEVEL

For this report the freezing level is defined as any altitude at which the temperature is 0° centigrade. Multiple freezing levels may occur on a single rawinsonde observation. The data presented is based on all freezing level occurrences.

TABLE XXIII
MEAN AND EXTREME HEIGHTS (FEET WSL) OF THE FREEZING LEVEL BY MONTHS AND BY SEASONS

STALLION SITE

PERIOD OF RECORD 1961-1973

MONTH	TOTAL RAWINSONDE ASCENSIONS	MAXIMUM	MEAN	MINIMUM
JANUARY	424	15200	9200	4900
FEBRUARY	475	16100	9000	4900
MARCH	485	15100	9300	4900
APRIL	534	15300	11100	5400
MAY	463	16600	13100	6700
JUNE	354	17900	15000	11000
JULY	355	20700	16200	14300
AUGUST	387	18500	15800	13200
SEPTEMBER	366	18000	14700	9300
OCTOBER	419	17100	13600	5100
NOVEMBER	409	17300	11100	5000
DECEMBER	328	15200	9200	4900
SEASON				
WINTER	1227	16100	9100	4900
SPRING	1482	16600	11100	4900
SUMMER	1096	20700	15700	11000
FALL	1194	18000	13000	5000

ATMOSPHERIC STRUCTURE REPORT

STALLION SITE

SECTION II

SURFACE DATA

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TABLE XXV

MONTHLY AND ANNUAL TEMPERATURE MEANS AND EXTREMES (°FAHRENHEIT) AT SEVEN WSMR SITES

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	--------

STALLION SITE Elevation 4,940 FT MSL Period of Record 1962-1973

Mean Max	51	56	63	72	82	90	92	89	82	74	61	51	72
Mean Min	21	26	31	39	48	57	64	61	50	43	32	23	41
Abs Max	72	77	85	93	97	101	104	101	95	90	79	71	104
Abs Min	-12	2	6	17	30	40	54	47	35	20	14	2	-12

WSD* SITE Elevation 3,989 FT MSL Period of Record 1960-1973

Mean Max	57	61	69	78	87	94	95	92	87	78	66	57	77
Mean Min	25	29	36	46	53	62	67	64	58	45	33	27	45
Abs Max	78	81	89	97	100	108	108	104	99	94	83	75	108
Abs Min	-14	5	6	19	26	41	57	51	37	22	12	5	-14

JALLEN SITE Elevation 4,051 FT MSL Period of Record 1963-1973

Mean Max	55	59	67	76	86	92	95	91	85	77	64	56	75
Mean Min	25	29	35	44	52	61	67	65	57	46	34	27	45
Abs Max	76	81	89	98	98	108	106	106	98	92	84	76	108
Abs Min	-2	5	7	22	30	43	58	50	37	28	16	7	-2

APACHE SITE Elevation 3,956 FT MSL Period of Record 1963-1973

Mean Max	51	60	68	77	86	92	95	92	86	79	65	56	76
Mean Min	24	27	35	44	52	61	66	63	57	44	33	26	44
Abs Max	78	80	89	97	100	108	107	103	99	93	82	75	108
Abs Min	-2	7	7	20	28	42	59	53	37	21	13	2	-2

"A" SITE Elevation 4,238 FT MSL Period of Record 1950-1973

Mean Max	56	60	66	75	84	93	93	91	86	76	64	56	75
Mean Min	34	38	43	52	60	69	70	69	63	53	41	35	52
Abs Max	76	81	86	94	103	106	107	103	98	92	84	77	107
Abs Min	-6	8	16	29	38	50	59	55	46	33	22	8	-6

HMN* SITE [14] Elevation 4,090 FT MSL Period of Record 1942-1973

Mean Max	55	60	66	76	85	94	94	93	87	77	64	56	75
Mean Min	27	31	37	45	54	63	68	66	59	48	34	28	47
Abs Max	79	80	87	96	103	107	107	106	103	93	81	75	107
Abs Min	-11	0	9	22	2	42	54	53	38	24	12	2	-11

SMR* SITE Elevation 3,909 FT MSL Period of Record 1963-1973

Mean Max	56	60	68	77	86	93	95	91	86	77	65	56	76
Mean Min	27	31	39	48	56	64	68	65	60	47	37	29	48
Abs Max	78	83	87	96	100	106	108	103	98	93	82	74	108
Abs Min	4	7	9	22	32	42	59	57	42	23	16	6	4

*White Sands Desert

*Small Missile Range

*Holloman

TABLE XXVI

MONTHLY AND ANNUAL MEAN PRECIPITATION (INCHES) AT SEVEN WSMR SITES

Site	Stallion	White Sands Desert	Jallen	"A"	Holloman* [14]	Small Missile Range	Apache
Elevation	4,940	3,989	4,051	4,238	4,070	3,999	3,956
Period of Record	1963-73	1963-73	1966-73	1950-73	1942-73	1964-73	1964-73
Jan	0.12	0.29	0.26	0.48	0.41	0.29	0.29
Feb	0.19	0.40	0.34	0.57	0.40	0.39	0.18
Mar	0.29	0.25	0.14	0.52	0.53	0.26	0.17
Apr	0.10	0.14	0.07	0.22	0.12	0.13	0.12
May	0.30	0.15	0.37	0.23	0.30	0.16	0.15
Jun	0.97	1.39	0.77	0.89	0.98	1.04	0.96
Jul	1.71	1.94	1.82	2.29	1.86	1.89	1.35
Aug	2.13	2.06	1.50	1.86	1.95	2.48	2.13
Sep	1.27	1.39	1.07	1.29	1.32	1.15	1.21
Oct	0.96	0.75	0.98	1.06	1.04	0.77	0.63
Nov	0.25	0.37	0.44	0.42	0.34	0.35	0.35
Dec	0.52	0.47	0.55	0.76	0.62	0.64	0.58
Annual	8.80	10.20	8.27	10.59	8.76	9.55	7.87

*Precipitation records from Holloman Air Force Base were used for the period 1942-64; records from Holloman Rawinsonde Site were used for the years 1965-73.

TABLE XXVII
ANNUAL RAINFALL (INCHES)
BY YEARS AT STALLION SITE
1963-1973

Year	Rainfall
1963	6.90
1964	5.05
1965	9.36
1966	7.68
1967	11.73
1968	8.68
1969	10.82
1970	3.73
1971	10.65
1972	13.44
1973	8.86

TABLE XXVIII
MONTHLY AND ANNUAL MEAN AND MAXIMUM
SNOWFALL (INCHES) AT "A" STATION
1950-1973

Month	Mean Snowfall	Maximum Snowfall	Date
Jan	1.3	6.9	1972
Feb	1.5	8.6	1952
Mar	0.5	3.5	1958
Apr	0.0	T	1971*
May	0.0	0.0	
Jun	0.0	0.0	
Jul	0.0	0.0	
Aug	0.0	0.0	
Sep	0.0	0.0	
Oct	0.0	T	1972*
Nov	0.8	6.2	1961
Dec	2.4	14.9	1967
Annual	6.5	18.5	1969

*Also occurred on prior dates
NOTE: "A" Station snowfall records have been presented since
this data is not available from Stallion Site.

TABLE XXIX
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

DAY	WIND DIR SPD (DEG)(KT)	PRVL DIR**	JANUARY		PEAK GUST	TOTAL OBSNS
			SOLAR MEAN	DIP		
			SPD (KT)	SPD (DEG)(KT)		
1	353 2.5	N	4.1	50	11 1966	262
2	355 2.5	N	4.1	70	4 1972	261
3	357 2.7	N	4.2	70	4 1972	261
4	356 2.4	N	4.0	70	4 1972	261
5	354 2.2	N	3.9	50	14 1967	261
6	356 2.4	N	3.9	360	6 1967	261
7	360 2.4	N	3.7	360	6 1967	262
8	4 2.1	N	3.4	340	6 1967	262
9	23 1.9	NNE	3.4	360	6 1967	266
10	14 1.2	NNE	3.9	360	6 1967	266
11	332 1.0	S	4.9	250	23 1964	268
12	301 1.3	S	5.8	260	22 1969	267
13	292 1.6	SSW	6.4	270	22 1969	267
14	285 1.9	SSW	6.9	200	2 1971	267
15	284 1.8	SSW	6.9	200	2 1971	268
16	298 1.9	SSW	6.9	210	37 19 1973	268
17	307 1.4	N	5.9	220	33 19 1973	264
18	308 1.7	N	4.5	70	33 3 1972	264
19	313 2.0	N	4.6	70	36 3 1972	264
20	331 1.9	N	4.3	70	32 3 1972	264
21	337 2.1	N	4.4	70	42 3 1972	264
22	341 2.5	N	4.5	70	38 3 1972	264
23	347 2.4	N	4.6	70	37 3 1972	264
24	349 2.5	N	4.4	70	36 3 1972	264
FOR THE MONTH						
368	1.8	N	4.7	50		6344

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION FOR SIFT MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

DAY	TIME	DIR**	FEBRUARY		PEAK GUST	TOTAL OBSNS	
			DIR SPD (KT)	MEAN SPD (KT)			
1	352	2.7	4.8	70	37	1967	241
2	351	2.0	4.9	70	39	6 1967	241
3	355	3.0	4.9	270	34	15 1967	241
4	352	2.8	4.7	30	30	22 1972*	240
5	350	2.9	4.6	40	29	15 1973*	239
6	350	3.3	4.6	30	29	15 1973	239
7	350	3.2	4.4	50	28	21 1973	238
8	350	2.0	4.2	50	31	21 1973	239
9	350	3.2	5.1	360	40	20 1970	243
10	350	1.0	5.6	330	36	1 1972	243
11	350	1.4	5.4	140	36	20 1971	242
12	350	1.5	7.0	340	37	7 1971	242
13	351	1.8	7.0	140	37	20 1971	242
14	352	1.4	7.4	320	37	7 1971	242
15	359	1.3	7.4	320	35	20 1967	242
16	357	1.1	7.5	260	49	3 1971	243
17	358	.7	7.1	250	32	24 1971	240
18	354	.5	5.7	350	33	15 1966	240
19	310	1.8	4.9	350	33	15 1966	240
20	321	1.3	4.7	320	28	14 1970*	240
21	326	1.0	4.8	70	45	5 1967	240
22	320	2.4	4.8	70	44	5 1967	240
23	345	2.5	4.7	70	36	5 1967	240
24	355	2.0	4.8	350	42	21 1968	240
FOR THE MONTH							
	352	1.5	5.5		49		5777

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

HR	RESULTANT WIND (DEG) (MI)	PRVL DIR**	SCALE MEAN SPD (KT)	PEAK DIR SPD (KT)	GUST DAY	YR	TOTAL OBSNS
1	332 2.2	N	5.2	200	30	5 1971	261
2	340 2.7	N	5.4	70	32	11 1968	261
3	342 2.6	N	5.2	330	33	4 1972	261
4	345 2.7	N	5.2	70	28	11 1968	260
5	348 3.2	N	5.3	240	40	12 1971	260
6	353 3.1	N	5.2	210	25	29 1973*	260
7	357 3.2	N	5.2	40	28	2 1971*	260
8	10 2.6	N	5.5	10	33	22 1966	261
9	10 1.4	N/E	6.4	250	39	2 1966	257
10	270 .9	S	7.6	220	39	2 1966	257
11	256 1.9	S	8.1	200	43	27 1970	257
12	245 2.4	SSW	8.9	250	40	13 1973	257
13	239 3.8	SSW	9.3	260	41	27 1970	257
14	240 4.1	SSW	9.4	250	47	5 1971	257
15	241 4.4	SSW	9.9	240	44	5 1971*	258
16	241 4.0	SSW	10.0	290	61	24 1971	258
17	246 3.7	S	9.3	240	42	5 1971	260
18	243 2.9	S	8.3	240	53	11 1972	260
19	254 2.4	S	6.4	270	45	29 1967	260
20	272 2.3	N	5.6	270	38	29 1967	260
21	286 2.3	SSW	5.8	310	32	5 1971	260
22	304 2.2	SSW	5.4	240	34	29 1967	260
23	315 2.2	NW	5.4	360	33	17 1966	260
24	326 2.0	N	5.4	360	38	17 1970	259
FOR THE MONTH							6221
250	1.8	N	6.4	61			

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE: WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD: 1965-1973

HR	RESULTANT WIND DIR SPO (DEG)(KT)	PRVL DIR** (KT)	SCALAR MEAN SPD (KT)	APRIL			TOTAL OBSNS
				DIR	SPD	PK	
				(DEG)	(KT)	DAY	
1	326 2.1	N	5.5	20	26	6 1971*	260
2	338 2.7	N	5.5	330	33	19 1973	260
3	341 2.6	N	5.4	210	30	12 1967	260
4	342 2.7	N	5.3	210	32	30 1973*	260
5	345 2.9	N	5.2	330	32	25 1969	260
6	348 2.9	N	5.3	320	27	25 1969	260
7	4 2.8	N	5.5	270	36	19 1973	260
8	21 2.2	WIDE	6.7	60	36	14 1966	260
9	332 .6	S	7.4	50	38	1 1966	263
10	244 1.7	S	9.4	200	38	30 1973*	263
11	255 3.5	SSW	9.2	200	38	13 1972	263
12	228 4.8	SSW	9.5	230	41	14 1973	263
13	230 5.9	SSW	10.5	180	53	25 1972	263
14	232 6.5	SSW	10.8	220	54	15 1971	263
15	235 6.7	SSW	11.2	210	45	18 1972	263
16	235 6.5	SSW	11.3	200	61	21 1970	263
17	241 5.7	SSW	11.3	240	44	12 1972	261
18	242 4.9	SSW	10.6	220	42	14 1972	261
19	251 3.1	S	9.8	350	41	7 1973	261
20	250 2.7	S	7.2	30	32	7 1973	261
21	284 2.4	SSW	6.5	30	34	5 1971	261
22	290 2.4	SSW	6.0	200	37	21 1970	261
23	301 2.6	N	5.8	230	36	18 1966	261
24	310 2.1	N	5.6	20	30	5 1971	261
FOR THE MONTH							
26	2.3	N	7.7		61		6272

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

DAY	DIR	RESULANT WIND	PRVL DIR**	SCALAR MEAN	DIR SPD (KT)	PEAK GUST	YR	TOTAL OBSNS
1	346	2.3	N	5.5	20	36	1 1968	245
2	357	2.6	N	5.3	60	34	15 1970	246
3	357	3.2	N	5.1	60	29	15 1970	245
4	356	3.3	N	5.2	30	33	31 1973	245
5	360	3.4	N	5.3	50	48	11 1965	245
6	5	3.3	N	5.1	260	35	26 1973	243
7	22	3.2	N	5.4	260	38	26 1973	242
8	43	2.0	UNE	6.3	330	38	27 1973	247
9	187	.1	S	7.0	330	37	27 1973	251
10	233	2.0	SSW	7.7	260	37	10 1966	251
11	230	3.5	SSW	8.5	190	40	5 1973	250
12	225	4.7	SSW	8.9	180	38	4 1971*	251
13	224	5.7	SSW	9.6	190	40	4 1971	251
14	227	5.4	SSW	10.2	210	43	4 1971	250
15	225	6.5	SSW	10.6	350	54	7 1967	252
16	226	6.5	SSW	11.0	240	40	13 1967*	252
17	225	6.3	SSW	11.1	180	40	27 1969*	250
18	225	5.6	SSW	10.3	160	43	12 1973	249
19	225	4.1	S	8.9	300	36	11 1969	249
20	240	2.7	WSW	7.4	330	37	22 1973	248
21	262	2.1	W	6.6	50	42	6 1972	248
22	294	1.8	WNW	6.0	40	36	6 1972	247
23	310	1.9	W	5.5	40	42	6 1972	246
24	336	1.7	N	5.6	40	39	11 1973	246
FOR THE MONTH								5949
254	1.4		N	7.4		54		

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION, MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

H	RESULTANT WIND (KTS) (KT)	PRVL DIR**	SCALAR MEAN SPD (KT)	PEAK GUST SPD (KTS) (KT)	DAY	YR	TOTAL OBSNS
1	327 1.8	N	4.3	270 29	25	1969	251
2	340 1.8	N	4.3	360 30	11	1970	251
3	350 1.9	N	4.3	360 30	11	1970*	251
4	353 2.1	N	4.2	40 25	29	1967	251
5	355 2.2	N	4.3	60 30	9	1966	250
6	2 2.3	N	4.1	360 34	9	1966	248
7	22 2.0	N	4.7	360 34	9	1966	250
8	34 1.0	NE	5.3	360 32	9	1966	254
9	140 1.1	SSW	6.0	240 30	15	1967*	251
10	211 2.6	SSW	6.9	60 30	9	1966	252
11	212 3.8	SSW	7.4	210 32	24	1969	253
12	220 4.7	SSW	8.0	230 32	26	1965	252
13	219 5.3	SSW	8.6	180 46	29	1969	252
14	220 5.9	SSW	9.0	230 38	13	1973	251
15	223 6.2	SSW	9.6	210 46	15	1970	252
16	215 6.1	SSW	10.2	90 41	29	1967	252
17	216 5.5	SSW	10.2	240 45	2	1973	252
18	216 4.4	SSW	10.0	210 40	13	1973	251
19	216 4.1	SSW	8.7	240 42	3	1967	250
20	221 2.8	S	6.6	360 42	10	1973	251
21	250 2.2	N	6.2	230 40	18	1969	251
22	270 1.9	N	5.6	360 39	6	1969	251
23	240 1.3	N	4.7	-10 27	12	1973	249
24	305 1.4	NNW	4.5	200 36	18	1965	249
FOR THE MONTH							6025
255 2.0 SSW							
6.6 46							

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT.)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

STATION	RESULTANT WIND (DEG)	PRVL DIR**	SCALAR MEAN SPD (KT)	JULY		PEAK GUST SPD (KT)	DAY	YR	TOTAL OBSNS
				DIR (DEG)	SPD (KT)				
1	7	N	4.4	120	27	8	1966*	246	
2	11	N	4.1	60	25	20	1971*	247	
3	6	N	4.1	50	29	26	1973	247	
4	4	N	3.0	50	24	31	1973	247	
5	10	N	3.8	30	25	31	1969	246	
6	10	N	4.0	40	25	31	1969	241	
7	26	N	4.6	40	27	25	1973	245	
8	50	ENE	5.2	40	32	25	1973	246	
9	60	S	5.2	60	29	25	1973	247	
10	155	S	5.5	60	31	25	1973	246	
11	207	SSW	5.7	40	28	31	1969	246	
12	207	SSW	5.9	120	30	19	1969	247	
13	204	SSW	6.2	240	34	19	1969	247	
14	204	SSW	6.8	160	48	18	1969	246	
15	194	S	7.6	320	43	14	1968	249	
16	194	S	8.1	180	42	7	1965	249	
17	183	S	8.9	80	46	31	1966	245	
18	140	S	9.1	120	44	6	1973	242	
19	160	S	8.0	150	37	6	1973	244	
20	137	S	8.7	170	41	25	1973	243	
21	54	S	5.7	360	33	31	1969	244	
22	6	N	5.3	110	44	12	1967	242	
23	359	N	4.6	50	30	31	1965	240	
24	354	N	4.6	360	25	5	1970*	243	
FOR THE MONTH									
44	.1	N	5.7		48			5885	

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
JAGLION SITE JAGLE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD 1965-1973

	WIND DIR	RESULTANT DIR	PRVL DIR**	SCALAR SPD (KT)	PEAK GUST DIR SPD (DEG)(KT)	DAY	YR	TOTAL OBSNS
1	357	1.7	N	4.0	10	24	10 1966	244
2	360	1.0	N	3.8	40	20	24 1966	244
3	1	2.1	N	3.6	220	24	25 1972	243
4	5	2.3	N	3.0	30	28	2 1966	245
5	4	2.6	N	3.8	70	32	2 1966	245
6	7	2.8	N	3.8	60	29	2 1966	244
7	14	2.9	N	4.1	60	23	2 1966	245
8	45	2.4	ENE	4.4	30	24	25 1972	245
9	95	.8	S	4.5	40	27	25 1972	245
10	174	1.1	S	4.0	70	24	25 1972	245
11	200	1.6	SSW	5.3	30	25	22 1966	247
12	205	1.7	SSW	5.5	50	26	22 1966	247
13	206	2.1	S	6.0	120	29	9 1972	240
14	210	2.4	S	6.4	60	33	10 1971	244
15	190	3.1	S	7.2	100	43	10 1973	244
16	194	2.8	S	7.6	270	40	10 1971	246
17	194	2.4	S	7.7	30	45	6 1972	246
18	174	2.3	S	7.5	320	51	11 1966	246
19	176	1.7	S	6.6	90	43	7 1971	246
20	155	.6	S	5.8	60	36	8 1971	246
21	151	.2	S	5.0	320	37	21 1972	246
22	354	.5	S	4.8	240	31	28 1971	246
23	327	.5	N	4.4	220	27	21 1968	245
24	352	1.1	N	4.2	70	27	24 1972	245
FOR THE MONTH								
208	.1	N		3.2	51			5885

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

TABLE XXIX (CONT)

SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE: JMWL SAMS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD: 1965-1973

HOUR	RESULT	TACT	DIR**	PRVL	SCALAR		PEAK GUST	TOTAL OBSNS
					SPD (KT)	DIR (DEG)		
SEPTEMBER								
	DIR SPD (DEG) (KT)				SPD (KT)	DIR (DEG)	SPD DAY YR	
1	345 1.2	N			3.6	30	31 10 1970	255
2	351 1.5	N			3.6	30	31 10 1970	254
3	357 1.9	N			3.8	30	30 10 1970	254
4	358 2.0	N			3.8	30	31 10 1970	255
5	359 2.3	N			3.9	30	31 16 1971	254
6	2 2.6	N			4.1	40	33 16 1971	251
7	15 2.5	N			4.2	20	27 10 1970	257
8	31 2.6	W			4.9	200	29 22 1970*	258
9	04 1.1	S			5.1	70	28 15 1971*	258
10	190 .4	SSW			6.1	70	28 30 1966*	259
11	227 1.5	SSW			6.4	60	29 21 1972*	259
12	225 2.1	S			6.6	240	29 17 1971*	259
13	227 2.7	SSW			7.1	200	33 23 1973	259
14	226 3.0	SSW			7.4	160	38 4 1969	259
15	226 3.1	SSW			7.6	200	35 23 1973	259
16	232 2.7	SSW			7.8	30	36 22 1971	259
17	218 2.1	S			7.7	60	45 27 1966	256
18	193 1.5	S			6.5	250	38 23 1967	256
19	210 1.0	S			5.0	30	30 22 1971*	256
20	245 .6	S			4.4	360	34 2 1966	258
21	240 .9	SSW			4.0	330	27 25 1973*	256
22	310 .9	N			3.9	60	25 22 1971	255
23	344 .9	N			3.7	40	32 9 1970	256
24	347 1.2	N			3.7	40	32 9 1970	256
FOR THE MONTH								
24	.6	N			5.2		45	6158

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES A MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION, MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

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TABLE XXIX (CONT)
SURFACE WIND DATA BY MONTH AND BY HOUR
STATION SITE: WHITE SANDS MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD: 1965-1973

	DIR	RESULTANT WIND DIR SPO (KTS)	PRVL DIR**	OCTOBER			TOTAL OBSNS
				SCALAR MEAN SPO (KT)	PEAK GUST DIR SPO (KTS)	YR	
1	359	2.9	N	4.5	300	32 14 1966	270
2	350	3.2	N	4.7	360	38 14 1966	270
3	3	3.5	N	4.8	460	42 14 1966	270
4	3	3.5	N	4.7	300	40 14 1966	270
5	3	3.7	N	4.8	360	32 14 1966	270
6	4	3.8	N	4.4	60	33 31 1972	270
7	4	3.5	N	4.7	20	39 29 1967	271
8	24	3.5	WNE	5.5	10	42 29 1967	271
9	35	2.1	ENE	5.2	460	36 29 1967	273
10	30	.2	SSW	5.7	220	40 29 1971	272
11	255	.7	S	6.8	220	43 29 1971	272
12	255	1.6	SSW	7.2	220	39 29 1971	272
13	227	2.3	SSW	7.4	220	37 29 1971	272
14	225	2.9	SSW	7.5	230	39 29 1971	273
15	217	2.6	SSW	7.1	240	38 29 1971	273
16	217	2.8	SSW	7.1	240	35 13 1969	273
17	207	2.5	SSW	6.7	200	32 8 1973	268
18	215	1.6	S	5.1	330	31 25 1972	268
19	251	1.3	S	4.7	220	50 7 1970	268
20	286	1.1	N	4.5	210	52 7 1970	268
21	325	1.3	N	4.3	210	38 7 1970	269
22	356	2.0	N	4.5	320	30 12 1972	268
23	343	2.2	N	4.5	40	48 31 1966	269
24	355	2.8	N	4.6	60	44 31 1966	268
FOR THE MONTH							
	355	1.1	N	5.5	52		n488

*ALSO OCCURRED ON PRIOR DATES

-10 INDICATES MISSING DIRECTION

**PRVL DIR IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

Source: U.S. DATA BY MONTH AND BY HOUR
FALLDOWN SITE: THE S-105 MISSILE RANGE, NEW MEXICO
PERIOD OF RECORD: 1965-1973

NO.	MILES FLIGHT (M)	DRIVE TIME	SCALAR DEVI		PEAK GUST	TOTAL OHSMS
			SP	SPU DAY YK		
1	358 2.7	1	4.7	60 39	1 1966	238
2	357 2.8	1	4.7	60 36	1 1966	238
3	355 3.2	1	4.9	60 33	1 1966	238
4	350 3.1	1	4.8	60 30	1 1966	239
5	350 3.2	1	4.7	55 27	1 1971	239
6	350 3.1	1	4.8	60 28	1 1971	238
7	3 3.2	1	4.7	10 28	23 1970*	240
8	13 2.9	1	4.7	21 40	19 1973	239
9	26 2.1	TIME	4.5	60 33	26 1968	249
10	1 3	5	4.6	50 39	20 1968	246
11	250 3	55	5.4	250 42	19 1973	245
12	250 1.7	55	6.3	30 34	20 1968*	244
13	248 2.3	55	6.6	250 38	19 1973	246
14	237 2.7	55	7.0	250 37	19 1973	247
15	230 2.6	55	7.0	250 40	1 1973	247
16	245 2.4	55	8.6	220 36	8 1966	247
17	231 1.0	5	5.5	240 30	8 1966	243
18	250 1.7	5	4.5	350 35	17 1969	242
19	240 1.6	55	4.2	240 36	26 1973*	242
20	307 1.6	1	4.2	90 40	2 1967	243
21	321 1.0	1	4.4	90 40	2 1967	242
22	330 2.2	1	4.4	90 37	2 1967	242
23	344 2.4	1	4.4	350 34	27 1971	241
24	352 2.6	1	4.4	350 32	27 1971	241
FOR THE MONTH	528 1.4	1	5.1	42		5816

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INDICATES A MISSING DIRECTION

WIND DIRECTION IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD

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TABLE XXIX (CONT)

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-10 INDICATES A MISSING INSPECTION

WIND DIRECTION IS THE PREVAILING WIND DIRECTION, I. E., THE WIND DIRECTION MOST FREQUENTLY OBSERVED DURING THE GIVEN PERIOD.

LITERATURE CITED

1. Hoidale, M. M., M. P. Dayton, and L. Newman, December 1974, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air and Surface Data: White Sands Desert Site," DR-873, Forecast Section, WSMR Meteorological Team, Meteorological Support Technical Area, Atmospheric Sciences Laboratory, U. S. Army Electronics Command, White Sands Missile Range, New Mexico.
2. Hoidale, M. M., M. P. Dayton, and L. Newman, January 1975, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air and Surface Data: Holloman Site," DR-877, Forecast Section, WSMR Meteorological Team, Meteorological Support Technical Area, Atmospheric Sciences Laboratory, U. S. Army Electronics Command, White Sands Missile Range, New Mexico.
3. Hoidale, M. M., B. J. Gee, M. A. Seagraves, and G. W. Harmon, April 1969, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air Data: Small Missile Range," DR-324, Meteorological Support Division, Environmental Sciences Department, U. S. Army Electronics Research and Development Activity, White Sands Missile Range, New Mexico. AD 857 332
4. Taft, P. H. and M. M. Hoidale, April 1969, "White Sands Missile Range, Climatology No. 6, Small Missile Range Site, WSMR," DR-400, Atmospheric Sciences Research Office, U. S. Army Electronics Research and Development Activity, White Sands Missile Range, New Mexico. AD 860 148
5. Hoidale, M. M., R. L. Russo, and L. Newman, May 1973, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air and Surface Data: Jallen Site," DR-776, Forecast Section, WSMR Meteorological Team, Atmospheric Sciences Laboratory, U. S. Army Electronics Command, White Sands Missile Range, New Mexico. AD 762 159
6. Hoidale, M. M., B. J. Richart, and T. B. Hudson, May 1971, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 3, Upper Air Data: Apache Site," DR-621, Meteorological Support Division, Atmospheric Sciences Laboratory, White Sands Missile Range, New Mexico. AD 886 353L
7. Hoidale, M. M. and L. Newman, March 1974, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 1, Surface Wind, Cloud Cover, Visibility," DR-818, Forecast Section, WSMR Meteorological Team, Atmospheric Sciences Laboratory, U. S. Army Electronics Command, White Sands Missile Range, New Mexico. AD 776 908

LITERATURE CITED

8. Hoidale, M. M. and L. Newman, April 1974, "Atmospheric Structure, White Sands Missile Range, New Mexico, Part 2, Temperature, Relative Humidity, Dew Point, Station Pressure, Density, Clouds, Hydrometeors, and Lithometeors," DR-822, Forecast Section, WSMR Meteorological Team, Atmospheric Sciences Laboratory, U. S. Army Electronics Command, White Sands Missile Range, New Mexico. AD 779 435
9. Huschke, R. E., edited by, 1959, "Glossary of Meteorology," pp. 480, 216, 374, 437, 477, 499, American Meteorological Society, Boston, Massachusetts.
10. Brooks, C. E. and N. Carruthers, 1953: "Handbook of Statistical Methods in Meteorology," M. O. 538, Air Ministry, Meteorological Office, Her Majesty's Stationery Office, London, pp. 173, 179, 195-199.
11. Stidham, L. R., March 1962: "Computation of Rawinsonde Program," Data Reduction Division North, Holloman Air Force Base, New Mexico.
12. Hoidale, G. B., C. W. Querfeld, et al., September 1964: "Spectral Transmissivity of the Earth's Atmosphere in the 250 to 500 Wave Number Interval, Part 1, Meteorological Data Processing," Report ERDA-186, Environmental Sciences Directorate, U. S. Army Electronics Research and Development Activity, White Sands Missile Range, New Mexico. AD 448 070
13. "Reliability of Meteorological Data," IRIG Document 110-71, Revised March 1971; Inter-Range Instrumentation Group, White Sands Missile Range, New Mexico.
14. Laws, E. and J. Rivera, 1967: "Summary of Surface Weather Observations, Holloman Air Force Base," Detachment 24, 6th Weather Wing, Air Force Systems Command USAF, Air Force Missile Development Center, Holloman Air Force Base, New Mexico.