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ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2  
14805 LANCE MISSILE NUMBERS 3208/3207, ROUND NUMBERS 285 APT/28--ETC(U)  
JUL 76

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METEOROLOGICAL DATA REPORT

14805 LANCE  
MISSILE NOS. 3208/3207  
ROUND NOS. 285 APT/286 APT  
(29 July 1976)

BY

WSMR METEOROLOGICAL TEAM

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ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  ▶ Meteorological data gathered for the launching of 14805 Lance, Missile Numbers 3208/3207, Round Numbers 285 APT/286 APT, are presented in tabular form.		

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## CONTENTS

	PAGE
INTRODUCTION -----	1
INTRODUCTION -----	3
DISCUSSION -----	1
DISCUSSION -----	3
 TABLES	
I. Surface Observations taken at LC-39 -----	1
II. Surface Observations taken at WSD -----	2
III. Surface Observations taken at LC-39 -----	3
IV. Surface Observations taken at WSD -----	4
V. Pilot-Balloon-Measured Wind Data, Release No. 1 at 0955 MDT -----	5
VI. Pilot-Balloon-Measured Wind Data, Release No. 2 at 1003 MDT -----	7
VII. Pilot-Balloon-Measured Wind Data, Release No. 3 at 1025 MDT -----	10
VIII. Pilot-Balloon-Measured Wind Data, Release No. 4 at 1032 MDT -----	12
IX. Stallion Significant Level Data (Release Time: 0940 MDT) -----	15
X. Stallion Upper Air Data (Release Time: 0940 MDT) -----	16
XI. Stallion Mandatory Levels (Release Time: 0940 MDT) -----	23
XII. WSD Significant Level Data (Release Time: 0950 MDT) -----	24
XIII. WSD Upper Air Data (Release Time: 0950 MDT) -----	26
XIV. WSD Mandatory Levels (Release Time: 0950 MDT) -----	34

CONTENTS (CONT)

	PAGE
XV. Jallen Significant Level Data (Release Time: 1000 MDT) -----	35
XVI. Jallen Upper Air Data (Release Time: 1000 MDT) -----	37
XVII. Jallen Mandatory Levels (Release Time: 1000 MDT) -----	44

## INTRODUCTION

14805 Lance, Missile Number 3208, Round Number 285 APT, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1000 HRS MDT, 29 July 1976. The scheduled launch time was 1000 HRS MDT.

## DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	4,063.75	FEET/MSL
PRESSURE	878.3	MBS
TEMPERATURE	23.6	°C
RELATIVE HUMIDITY	70	%
DEW POINT	17.7	°C
DENSITY	1,021.0	GM/M <sup>3</sup>
WIND SPEED		CALM
WIND DIRECTION		CALM
CLOUD COVER	8	CI

TABLE I. SURFACE OBSERVATIONS TAKEN AT LC-39, 1000 HRS MDT/29 JULY 1976.

ELEVATION	3,990.0	FEET/MSL
PRESSURE	881.5	MBS
TEMPERATURE	24.0	°C
RELATIVE HUMIDITY	62	%
DEW POINT	16.3	°C
DENSITY	1,025.0	GM/M <sup>3</sup>
WIND SPEED	02	MPH
WIND DIRECTION	240	DEGREES
CLOUD COVER	8	C1

TABLE II. SURFACE OBSERVATIONS TAKEN AT WSD,  
1000 HRS MDT/29 JULY 1976.

### INTRODUCTION

14805 Lance, Missile Number 3207, Round Number 286 APT, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1030 HRS MDT, 29 July 1976. The scheduled launch time was 1030 HRS MDT.

### DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	4,063.75	FEET/MSL
PRESSURE	878.4	MBS
TEMPERATURE	25.3	°C
RELATIVE HUMIDITY	64	%
DEW POINT	18.0	°C
DENSITY	1,018.0	GM/M <sup>3</sup>
WIND SPEED		CALM
WIND DIRECTION		CALM
CLOUD COVER	8	Ci

TABLE III. SURFACE OBSERVATIONS TAKEN AT LC-39, 1030 HRS MDT/29 JULY 1976.

ELEVATION	3,990.0	FEET/MSL
PRESSURE	881.5	MBS
TEMPERATURE	24.5	°C
RELATIVE HUMIDITY	60	%
DEW POINT	16.1	°C
DENSITY	1,025.0	GM/M <sup>3</sup>
WIND SPEED	03	MPH
WIND DIRECTION	160	DEGREES
CLOUD COVER	8	CI

TABLE IV. SURFACE OBSERVATIONS TAKEN AT WSD,  
1030 HRS MDT/29 JULY 1976.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR		CALM
100		CALM
200	207	2.0
300	188	3.0
400	224	3.5
500	218	6.5
600	221	4.5
700	224	4.5
800	225	5.5
900	212	8.0
1000	240	4.5
1100	241	4.0
1200	184	2.5
1300	160	4.0
1400	172	5.5
1500	159	2.0
1600	204	1.0
1700	168	3.5
1800	153	5.0
1900	139	5.0
2000	114	5.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
2100	110	5.0
2200	099	6.0
2300	082	7.0
2400	096	7.5
2500	106	9.5
2600	109	10.0
2700	099	10.5
2800	108	10.0
2900	111	10.5
3000	124	8.5
3100	144	8.0
3200	152	9.0
3300	152	7.5
3400	165	5.5
3500	180	5.5
3600	179	6.0
3700	164	5.5
3800	177	5.0
3900	180	5.5
4000	182	5.5
4100	194	4.5

TABLE V. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1  
RELEASED FROM LC-39, AT 0955 HRS MDT/29 JULY 1976  
14805 LANCE, MISSILE NO. 3208, ROUND NO. 285 APT

PIBAL RELEASE POINT WSTM COORDINATES:

X = 530,938.82    Y = 186,564.96    Z = 4,063.75

APPROXIMATELY: 1 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	187	6.0
4300	175	11.0
4400	163	8.5
4500	170	6.0
4600	183	8.5
4700	183	8.0
4800	172	9.0
4900	168	9.0
5000	184	8.5
5100	180	10.5
5200	183	9.0
5300	194	10.0
5400	193	10.0
5500	204	8.0
5600	205	11.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
5700	202	12.0
5800	201	12.0
5900	200	12.0
6000	192	11.0
6100	195	13.5
6200	204	12.0
6300	192	11.0
6400	195	12.0
6500	200	9.5
6600	182	10.0
6700	189	11.5
6800	189	11.5
6900	191	13.5
7000	194	10.0
7100	200	9.0

TABLE V. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR		CALM
100		CALM
200		CALM
300	330	1.5
400	230	5.5
500	202	7.5
600	218	4.0
700	202	4.5
800	270	1.5
900	170	2.5
1000	035	2.0
1100	343	3.5
1200	293	3.5
1300	270	5.0
1400	203	5.0
1500	183	7.5
1600	195	5.5
1700	188	6.0
1800	216	1.0
1900	203	3.0
2000	175	6.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
2100	152	9.0
2200	140	8.0
2300	092	6.5
2400	100	9.0
2500	096	9.5
2600	084	8.5
2700	090	10.0
2800	103	12.0
2900	104	12.5
3000	112	13.5
3100	143	10.0
3200	141	11.0
3300	157	10.5
3400	146	5.5
3500	169	10.5
3600	160	8.0
3700	182	12.5
3800	204	10.0
3900	151	4.0
4000	209	7.0
4100	214	7.0

TABLE VI. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 2  
RELEASED FROM LC-39, AT 1003 HRS MDT/29 JULY 1976  
14805 LANCE, MISSILE NO. 3208, ROUND NO. 285 APT

PIBAL RELEASE POINT WSTM COORDINATES:

X = 530,938.82 Y = 186,564.96 Z = 4,063.75

APPROXIMATELY: 1 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	221	5.5
4300	163	9.5
4400	181	6.5
4500	171	2.0
4600	154	5.5
4700	209	9.0
4800	203	11.5
4900	196	11.5
5000	193	10.0
5100	180	12.5
5200	184	16.5
5300	177	13.5
5400	179	9.5
5500	200	16.5
5600	208	12.5
5700	206	15.0
5800	196	14.5
5900	190	13.0
6000	200	14.5
6100	180	14.5
6200	201	11.5
6300	180	9.5
6400	193	11.0
6500	189	7.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
6600	175	10.0
6700	188	12.0
6800	188	12.0
6900	183	11.5
7000	180	12.0
7100	184	12.5
7200	190	12.5
7300	207	14.5
7400	196	12.0
7500	193	8.0
7600	194	10.0
7700	204	15.0
7800	200	14.0
7900	196	11.0
8000	202	13.0
8100	201	14.5
8200	189	15.5
8300	197	17.5
8400	201	14.0
8500	196	16.0
8600	204	13.5
8700	206	15.5
8800	199	18.5
8900	204	18.0

TABLE VI. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
9000	199	19.0
9100	197	18.0
9200	196	20.5
9300	193	21.0
9400	194	18.0
9500	196	19.0
9600	189	20.0
9700	196	18.5
9800	191	15.5
9900	197	15.0
10000	198	13.0
10100	203	15.0
10200	211	16.5
10300	205	19.5
10400	228	13.5
10500	233	9.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
10600	207	11.0
10700	219	9.5
10800	223	15.5
10900	195	12.5
11000	185	13.5
11100	217	9.5
11200	204	6.0
11300	199	10.0
11400	212	9.5
11500	205	9.5
11600	236	11.5
11700	221	11.5
11800	218	12.0
11900	238	13.0
12000	204	12.0

TABLE VI. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR		CALM	2100	099	6.0
100	084	1.0	2200	107	10.0
200	180	0.5	2300	108	10.5
300	317	2.5	2400	109	10.0
400	297	3.5	2500	113	11.5
500	262	1.5	2600	126	8.0
600	184	1.5	2700	126	10.5
700	252	2.0	2800	137	12.0
800	109	4.0	2900	131	12.5
900	196	6.0	3000	148	12.0
1000	184	7.0	3100	145	8.0
1100	180	4.0	3200	148	11.5
1200	128	2.5	3300	188	8.0
1300	122	4.0	3400	208	6.5
1400	113	8.0	3500	209	11.0
1500	107	7.0	3600	208	14.5
1600	122	4.0	3700	213	13.5
1700	164	5.5	3800	193	11.5
1800	122	8.5	3900	170	9.5
1900	090	7.0	4000	170	7.0
2000	078	5.0	4100	164	11.5

TABLE VII. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 3  
RELEASED FROM LC-39, AT 1025 HRS MDT/29 JULY 1976  
14805 LANCE, MISSILE NO. 3207, ROUND NO. 286 APT

PIBAL RELEASE POINT WSTM COORDINATES:

X = 530,938.82    Y = 186,564.96    Z = 4,063.75

APPROXIMATELY: 1 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	175	11.5
4300	172	10.0
4400	193	6.5
4500	198	7.5
4600	204	8.5
4700	205	8.5
4800	197	9.0
4900	205	9.5
5000	205	10.0
5100	213	10.5
5200	208	11.0
5300	205	11.0
5400	181	14.5
5500	193	16.5
5600	201	17.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
5700	205	19.0
5800	217	17.0
5900	205	17.5
6000	204	18.5
6100	198	15.5
6200	190	14.0
6300	197	9.5
6400	219	9.0
6500	196	10.0
6600	196	11.0
6700	192	12.5
6800	187	13.0
6900	189	12.0
7000	180	11.5

TABLE VII. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR		CALM	2100	187	3.5
100		CALM	2200	228	6.5
200		CALM	2300	200	2.5
300	319	3.0	2400	183	7.5
400	094	1.5	2500	183	8.5
500	295	2.0	2600	135	7.0
600	248	2.5	2700	123	10.5
700	247	2.5	2800	124	12.0
800	254	0.5	2900	122	14.0
900	185	1.0	3000	132	12.5
1000	265	3.5	3100	137	11.0
1100	254	5.0	3200	153	11.5
1200	235	6.0	3300	181	9.5
1300	250	5.0	3400	204	7.0
1400	261	3.5	3500	189	5.0
1500	281	3.5	3600	181	7.0
1600	239	5.5	3700	221	8.0
1700	233	6.5	3800	218	9.5
1800	216	6.0	3900	197	6.5
1900	224	9.5	4000	187	6.5
2000	211	6.0	4100	191	7.5

TABLE VIII. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 4  
RELEASED FROM LC-39, AT 1032 HRS MDT/29 JULY 1976  
14805 LANCE, MISSILE NO. 3207, ROUND NO. 286 APT

PIBAL RELEASE POINT WSTM COORDINATES:

X = 530,938.87 Y = 186,564.96 Z = 4,063.75

APPROXIMATELY: 1 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	175	5.0
4300	189	6.0
4400	208	7.5
4500	216	7.0
4600	219	8.0
4700	228	9.5
4800	219	13.0
4900	198	12.5
5000	204	11.5
5100	202	12.5
5200	210	12.5
5300	209	13.0
5400	209	11.0
5500	205	12.5
5600	200	15.0
5700	204	13.5
5800	205	12.5
5900	198	10.0
6000	205	13.5
6100	198	12.0
6200	200	11.0
6300	201	14.0
6400	203	10.5
6500	195	8.0

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
6600	181	8.0
6700	197	9.5
6800	197	9.5
6900	197	8.0
7000	183	10.0
7100	180	9.5
7200	180	11.5
7300	178	11.0
7400	194	7.5
7500	195	11.0
7600	191	12.5
7700	188	11.5
7800	190	14.0
7900	191	12.0
8000	188	13.0
8100	193	15.5
8200	198	16.0
8300	195	13.5
8400	190	15.5
8500	198	16.5
8600	200	19.5
8700	199	17.5
8800	206	15.5
8900	200	16.5

TABLE VIII. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
9000	195	16.0
9100	196	17.0
9200	207	16.5
9300	198	16.0
9400	190	20.5
9500	193	19.0
9600	199	18.0
9700	209	16.0
9800	197	16.5
9900	193	15.5
10000	201	16.0
10100	200	15.5
10200	205	12.0
10300	208	12.0
10400	203	14.0
10500	213	9.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
10600	194	10.0
10700	187	13.0
10800	201	11.5
10900	188	11.0
11000	211	11.0
11100	208	11.0
11200	209	13.0
11300	205	11.5
11400	185	12.5
11500	190	12.5
11600	201	13.0
11700	223	10.5
11800	209	7.0
11900	194	11.0
12000	213	10.5

TABLE VIII. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76  
 0940 HRS MDT  
 ASCENSION NO. 157

SIGNIFICANT LEVEL DATA  
 2110040157  
 STATION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE IX

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
851.4	4940.0	22.0	14.9	64.0
850.4	4973.5	20.1	13.1	64.0
824.8	5837.1	17.5	10.1	62.0
751.3	8450.5	15.5	4.8	49.0
700.4	10390.2	10.6	2.7	58.0
599.3	14599.6	2.6	-7.6	47.0
515.8	18523.7	-6.5	-15.2	50.0
500.8	19282.4	-6.5	-19.4	35.0
490.3	19826.8	-6.7	-26.4	19.0
458.3	21547.5	-10.5	-24.7	30.0
437.3	22728.9	-13.1	-31.8	19.0
400.3	24922.2	-18.3	-36.2	19.0
366.3	27092.6	-20.6	-39.2	17.0
300.4	31806.2	-32.6	-49.2	17.0
250.3	35947.6	-42.9		
200.3	40771.2	-54.6		
166.8	44554.5	-63.3		
150.1	46675.3	-66.5		
120.3	51080.7	-67.5		
100.2	54695.8	-69.4		
70.0	61901.5	-61.1		
57.3	66054.0	-56.2		
50.0	68916.0	-55.9		
30.1	79744.2	-49.4		
28.3	81086.9	-47.3		
20.0	88693.7	-46.6		
11.8	100407.5	-41.7		
10.0	104168.0	-36.4		
9.5	105347.6	-36.2		

UPPER AIR DATA  
2110040157  
STALLION

STATION ALTITUDE 4940.00 FEET MSL  
29 JULY 76 0940 HRS MDT  
ASCENSION NO. 157

WSTM SITE COORDINATES  
403783.00 FEET E  
701403.00 FEET N

TABLE X

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4940.0	851.4	22.0	64.0	997.3	671.8	360.0	1.9	1.000296
5000.0	849.6	20.0	63.9	1002.8	669.3	.1	1.9	1.000290
5500.0	834.7	18.5	62.8	990.9	667.4	1.1	1.5	1.000291
6000.0	820.0	17.4	61.2	977.8	665.9	2.7	1.2	1.000272
6500.0	805.5	17.0	58.7	962.0	665.4	5.8	.8	1.000266
7000.0	791.2	16.6	56.2	946.4	664.8	90.2	.5	1.000259
7500.0	777.2	16.2	53.7	931.2	664.3	133.3	1.5	1.000252
8000.0	763.5	15.8	51.2	916.1	663.8	120.7	2.5	1.000246
8500.0	750.0	15.4	49.2	901.6	663.2	112.7	3.6	1.000240
9000.0	736.5	14.1	51.5	889.4	661.7	109.9	4.7	1.000236
9500.0	723.3	12.8	53.9	877.4	660.2	108.3	5.8	1.000233
10000.0	710.4	11.6	56.2	865.5	658.7	116.3	5.9	1.000229
10500.0	697.6	10.4	57.7	853.7	657.3	125.5	6.1	1.000225
11000.0	684.8	9.4	56.4	841.0	656.1	135.4	7.3	1.000219
11500.0	672.2	8.5	55.1	828.6	654.9	143.1	8.4	1.000214
12000.0	659.9	7.5	53.8	816.3	653.7	150.0	9.3	1.000209
12500.0	647.8	6.6	52.5	804.3	652.6	151.1	9.0	1.000204
13000.0	635.9	5.6	51.2	792.4	651.4	149.8	8.1	1.000199
13500.0	624.2	4.7	49.9	780.6	650.2	130.0	7.6	1.000195
14000.0	612.8	3.7	48.6	769.1	649.0	109.6	8.1	1.000191
14500.0	601.5	2.8	47.3	757.7	647.9	100.7	9.7	1.000186
15000.0	590.2	1.7	47.3	746.6	646.5	96.4	11.0	1.000183
15500.0	579.0	.5	47.7	735.6	645.1	99.7	11.4	1.000179
16000.0	568.1	-.6	48.1	724.8	643.7	101.6	12.0	1.000176
16500.0	557.3	-1.8	48.5	714.2	642.3	101.8	12.9	1.000172
17000.0	546.7	-3.0	48.8	703.8	640.9	101.1	14.0	1.000169
17500.0	536.4	-4.1	49.2	693.5	639.5	99.8	15.2	1.000166
18000.0	526.2	-5.3	49.6	683.4	638.1	98.9	15.7	1.000163
18500.0	516.3	-6.4	50.0	673.4	636.7	98.0	16.0	1.000160
19000.0	506.3	-6.5	40.6	660.7	636.5	95.5	15.8	1.000155

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76 0940 HRS MDT  
 ASCENSION NO. 157

UPPER AIR DATA  
 2110040157  
 STALLION

WSTM SITE COORDINATES  
 493783.00 FEET E  
 731403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
19500.0	496.6	-6.6	28.6	648.4	636.3	92.9	15.3	1.000150
20000.0	487.0	-7.1	20.1	637.3	635.6	89.2	13.5	1.000146
20500.0	477.5	-8.2	23.3	627.5	634.3	84.3	11.3	1.000144
21000.0	468.2	-9.3	26.5	617.8	633.0	76.4	8.4	1.000142
21500.0	459.2	-10.4	29.7	608.3	631.7	65.4	6.5	1.000140
22000.0	450.1	-11.5	25.8	599.0	630.3	57.5	6.2	1.000137
22500.0	441.3	-12.6	21.1	589.8	629.0	54.3	6.7	1.000134
23000.0	432.5	-13.7	19.0	580.7	627.6	57.1	8.3	1.000132
23500.0	423.9	-14.9	19.0	571.7	626.1	60.4	9.9	1.000129
24000.0	415.5	-16.1	19.0	562.9	624.7	64.2	11.4	1.000127
24500.0	407.2	-17.3	19.0	554.2	623.2	65.9	12.2	1.000125
25000.0	399.0	-18.4	18.9	545.5	621.9	66.3	12.2	1.000123
25500.0	391.0	-18.9	18.5	535.6	621.3	67.0	12.5	1.000121
26000.0	383.0	-19.4	18.0	525.8	620.6	67.7	12.8	1.000119
26500.0	375.3	-20.0	17.5	516.3	619.9	70.6	14.3	1.000116
27000.0	367.7	-20.5	17.1	506.9	619.3	74.8	17.0	1.000114
27500.0	360.1	-21.6	17.0	498.6	617.9	76.8	19.3	1.000112
28000.0	352.6	-22.9	17.0	490.7	616.3	76.7	20.9	1.000110
28500.0	345.2	-24.2	17.0	483.0	614.8	75.5	21.9	1.000108
29000.0	338.0	-25.5	17.0	475.4	613.2	72.1	21.7	1.000107
29500.0	331.0	-26.7	17.0	467.9	611.6	69.2	21.4	1.000105
30000.0	324.1	-28.0	17.0	460.5	610.0	66.9	21.0	1.000103
30500.0	317.4	-29.3	17.0	453.3	608.4	64.7	21.2	1.000102
31000.0	310.8	-30.5	17.0	446.2	606.8	62.7	22.6	1.000100
31500.0	304.3	-31.8	17.0	439.2	605.2	61.7	23.9	1.000098
32000.0	297.8	-33.1	16.2**	432.2	603.6	61.9	25.1	1.000097
32500.0	291.4	-34.3	14.2**	425.0	602.1	62.8	26.3	1.000095
33000.0	285.0	-35.6	12.1**	417.9	600.5	64.5	27.5	1.000093
33500.0	278.8	-36.8	10.0**	410.9	598.9	65.5	28.3	1.000092
34000.0	272.7	-38.1	8.0**	404.1	597.3	65.4	28.4	1.000090

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76 0940 HRS MDT  
 ASCENSION NO. 147

UPPER AIR DATA  
 2110040157  
 STALLION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
34500.0	266.8	-39.3	-63.1	5.9**	397.4	595.8	64.6	27.2	1.000089
35000.0	261.0	-40.5	-67.1	3.9**	390.8	594.2	62.3	24.0	1.000087
35500.0	255.3	-41.8	-73.1	1.8**	384.4	592.6	60.4	21.6	1.000086
36000.0	249.7	-43.0			378.0	591.0	59.1	20.0	1.000084
36500.0	244.0	-44.2			371.3	589.4	60.1	18.1	1.000083
37000.0	238.4	-45.5			364.8	587.9	63.3	16.0	1.000081
37500.0	233.0	-46.7			358.4	586.3	64.3	13.8	1.000080
38000.0	227.7	-47.9			352.1	584.7	62.3	11.3	1.000078
38500.0	222.5	-49.1			345.9	583.1	57.8	9.5	1.000077
39000.0	217.4	-50.3			339.8	581.6	49.8	8.4	1.000076
39500.0	212.4	-51.5			333.9	580.0	41.3	7.5	1.000074
40000.0	207.6	-52.7			328.0	578.4	41.4	6.9	1.000073
40500.0	202.8	-53.9			322.3	576.8	41.6	6.3	1.000072
41000.0	198.1	-55.1			316.5	575.2	44.4	6.4	1.000070
41500.0	193.4	-56.3			310.6	573.7	47.5	6.7	1.000069
42000.0	188.7	-57.4			304.8	572.2	50.6	7.2	1.000068
42500.0	184.2	-58.6			299.1	570.7	53.4	7.8	1.000067
43000.0	179.8	-59.7			293.5	569.1	56.0	8.6	1.000065
43500.0	175.5	-60.9			288.1	567.6	59.2	9.7	1.000064
44000.0	171.3	-62.0			282.7	566.1	61.6	10.9	1.000063
44500.0	167.2	-63.2			277.5	564.5	63.3	12.0	1.000062
45000.0	163.1	-64.0			271.7	563.4	64.7	13.2	1.000061
45500.0	159.1	-64.7			266.0	562.4	69.0	14.0	1.000059
46000.0	155.2	-65.5			260.4	561.4	73.7	14.9	1.000058
46500.0	151.4	-66.2			254.9	560.4	77.9	15.5	1.000057
47000.0	147.7	-66.6			249.0	559.9	81.9	16.0	1.000055
47500.0	144.0	-66.7			243.0	559.8	84.9	16.4	1.000054
48000.0	140.4	-66.8			237.1	559.6	85.6	16.4	1.000053
48500.0	137.0	-66.9			231.3	559.5	86.2	16.3	1.000052
49000.0	133.6	-67.0			225.7	559.3	87.6	16.2	1.000050

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 157  
 0940 HRS MDT

UPPER AIR DATA  
 2110040157  
 STALLION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	"IND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
49500.0	133.2	-67.1			220.2	559.2	88.9	16.2	1.000049
50000.0	127.0	-67.3			214.9	559.0	90.4	16.0	1.000048
50500.0	123.9	-67.4			209.7	558.9	92.1	15.8	1.000047
51000.0	120.8	-67.5			204.6	558.7	93.8	15.6	1.000046
51500.0	117.8	-67.7			199.7	558.4	96.2	15.3	1.000044
52000.0	114.8	-68.0			195.0	558.0	98.7	15.1	1.000043
52500.0	112.0	-68.2			190.4	557.7	99.5	14.0	1.000042
53000.0	109.2	-68.5			185.8	557.3	95.4	10.9	1.000041
53500.0	106.4	-68.8			181.4	556.9	88.0	8.0	1.000040
54000.0	103.8	-69.0			177.1	556.6	70.2	6.6	1.000039
54500.0	101.2	-69.3			172.9	556.2	49.3	7.6	1.000039
55000.0	98.7	-69.0			168.5	556.6	34.5	9.2	1.000038
55500.0	96.3	-68.5			163.9	557.4	45.4	12.7	1.000036
56000.0	93.9	-67.9			159.4	558.1	53.2	16.8	1.000035
56500.0	91.6	-67.3			155.0	558.9	57.9	19.6	1.000035
57000.0	89.3	-66.7			150.8	559.7	62.0	19.2	1.000034
57500.0	87.1	-66.2			146.7	560.5	66.3	18.8	1.000033
58000.0	85.0	-65.6			142.7	561.3	72.8	18.3	1.000032
58500.0	82.9	-65.0			138.8	562.0	81.4	17.9	1.000031
59000.0	80.9	-64.4			135.0	562.8	90.1	17.9	1.000030
59500.0	78.9	-63.9			131.3	563.6	91.5	17.5	1.000029
60000.0	76.9	-63.3			127.7	564.4	90.0	16.9	1.000028
60500.0	75.1	-62.7			124.3	565.1	88.5	16.3	1.000028
61000.0	73.2	-62.1			120.9	565.9	86.8	14.7	1.000027
61500.0	71.4	-61.6			117.6	566.7	84.7	13.1	1.000026
62000.0	69.7	-61.0			114.4	567.5	84.0	12.1	1.000025
62500.0	68.0	-60.4			111.4	568.2	89.7	13.7	1.000025
63000.0	66.4	-59.8			108.4	569.0	94.1	15.4	1.000024
63500.0	64.8	-59.2			105.5	569.8	96.5	17.1	1.000023
64000.0	63.3	-58.6			102.7	570.6	97.5	18.6	1.000023

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76 0940 HRS MDT  
 ASCENSION NO. 147

UPPER AIR DATA  
 2110040157  
 STALLION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 791403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA	INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE					
64500.0	61.8	-58.0		100.0	571.4	98.3	20.1	1.000022
65000.0	60.3	-57.4		97.4	572.2	98.5	20.6	1.000022
65500.0	58.9	-56.9		94.8	573.0	98.6	20.9	1.000021
66000.0	57.4	-56.3		92.3	573.7	98.7	21.1	1.000021
66500.0	56.1	-56.2		90.1	573.9	99.1	19.8	1.000020
67000.0	54.8	-56.1		87.9	574.0	99.6	18.4	1.000020
67500.0	53.5	-56.0		85.8	574.0	100.7	17.3	1.000019
68000.0	52.2	-56.0		83.8	574.1	102.8	16.7	1.000019
68500.0	51.0	-55.9		81.8	574.2	105.1	16.2	1.000018
69000.0	49.8	-55.8		79.8	574.3	106.4	15.0	1.000018
69500.0	48.7	-55.5		77.9	574.7	107.3	13.6	1.000017
70000.0	47.5	-55.2		76.0	575.1	108.5	12.3	1.000017
70500.0	46.4	-54.9		74.1	575.5	105.6	13.2	1.000016
71000.0	45.3	-54.6		72.3	575.9	103.1	14.2	1.000016
71500.0	44.3	-54.3		70.5	576.3	99.8	15.5	1.000016
72000.0	43.3	-54.0		68.8	576.7	94.7	18.0	1.000015
72500.0	42.3	-53.7		67.1	577.1	90.9	20.6	1.000015
73000.0	41.3	-53.4		65.5	577.4	88.5	21.9	1.000015
73500.0	40.3	-53.1		63.9	577.8	86.6	22.1	1.000014
74000.0	39.4	-52.8		62.3	578.2	84.8	22.4	1.000014
74500.0	38.5	-52.5		60.8	578.6	86.0	22.5	1.000014
75000.0	37.6	-52.2		59.3	579.0	88.1	22.7	1.000013
75500.0	36.7	-51.9		57.8	579.4	90.2	22.9	1.000013
76000.0	35.9	-51.6		56.4	579.8	94.9	23.8	1.000013
76500.0	35.0	-51.3		55.0	580.2	99.2	24.8	1.000012
77000.0	34.2	-51.0		53.7	580.6	102.6	25.6	1.000012
77500.0	33.4	-50.7		52.4	581.0	104.6	26.0	1.000012
78000.0	32.7	-50.4		51.1	581.4	106.6	26.4	1.000011
78500.0	31.9	-50.1		49.8	581.8	107.1	25.3	1.000011
79000.0	31.2	-49.8		48.6	582.2	106.4	23.2	1.000011

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 157  
 0940 HRS MDT

UPPER AIR DATA  
 2110040157  
 STATION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA		INDEX OF REFRACTION
							SPEED	SPEED	
79500.0	30.4	-49.5		47.4	582.6	105.4	21.0	1.000011	
80000.0	29.7	-49.0		46.2	583.3	102.6	20.2	1.000010	
80500.0	29.1	-48.2		45.0	584.3	99.1	19.9	1.000010	
81000.0	28.4	-47.4		43.9	585.3	95.5	19.8	1.000010	
81500.0	27.8	-47.3		42.8	585.5	91.9	20.6	1.000010	
82000.0	27.1	-47.2		41.9	585.6	88.6	21.8	1.000009	
82500.0	26.5	-47.2		40.9	585.6	85.7	23.1	1.000009	
83000.0	25.9	-47.1		40.0	585.7	84.6	23.5	1.000009	
83500.0	25.3	-47.1		39.1	585.8	84.0	23.7	1.000009	
84000.0	24.8	-47.0		38.2	585.8	83.3	23.8	1.000008	
84500.0	24.2	-47.0		37.3	585.9	82.6	24.2	1.000008	
85000.0	23.7	-46.9		36.5	585.9	81.9	24.5	1.000008	
85500.0	23.1	-46.9		35.6	586.0	81.3	24.9	1.000008	
86000.0	22.6	-46.8		34.8	586.1	81.2	26.2	1.000008	
86500.0	22.1	-46.8		34.0	586.1	81.3	27.6	1.000008	
87000.0	21.6	-46.8		33.2	586.2	81.4	29.1	1.000007	
87500.0	21.1	-46.7		32.5	586.2	82.5	31.3	1.000007	
88000.0	20.6	-46.7		31.8	586.3	83.5	33.6	1.000007	
88500.0	20.2	-46.6		31.0	586.4	84.5	35.9	1.000007	
89000.0	19.7	-46.5		30.3	586.5	84.6	36.4	1.000007	
89500.0	19.3	-46.3		29.6	586.8	84.6	36.7	1.000007	
90000.0	18.9	-46.1		28.9	587.1	84.6	36.9	1.000006	
90500.0	18.4	-45.8		28.3	587.4	85.1	37.6	1.000006	
91000.0	18.0	-45.6		27.6	587.6	85.6	38.4	1.000006	
91500.0	17.6	-45.4		27.0	587.9	86.0	39.2	1.000006	
92000.0	17.2	-45.2		26.3	588.2	87.1	40.0	1.000006	
92500.0	16.8	-45.0		25.7	588.4	88.3	40.8	1.000006	
93000.0	16.5	-44.8		25.1	588.7	89.5	41.6	1.000006	
93500.0	16.1	-44.6		24.5	589.0	90.3	41.8	1.000005	
94000.0	15.7	-44.4		24.0	589.2	90.3	40.1	1.000005	

UPPER AIR DATA  
 2110040157  
 STALLION

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 157

0940 HRS MDT

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE X (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
94500.0	15.4	-44.2			23.4	589.5	90.2	38.5	1.000005
95000.0	15.1	-44.0			22.9	589.8	90.2	36.8	1.000005
95500.0	14.7	-43.8			22.4	590.1	88.7	36.6	1.000005
96000.0	14.4	-43.5			21.8	590.3	86.9	36.8	1.000005
96500.0	14.1	-43.3			21.3	590.6	85.0	37.1	1.000005
97000.0	13.8	-43.1			20.8	590.9	83.4	37.9	1.000005
97500.0	13.5	-42.9			20.4	591.1	82.5	40.2	1.000005
98000.0	13.2	-42.7			19.9	591.4	81.7	42.4	1.000004
98500.0	12.9	-42.5			19.4	591.7	81.0	44.7	1.000004
99000.0	12.6	-42.3			19.0	591.9	81.6	46.6	1.000004
99500.0	12.3	-42.1			18.5	592.2	82.4	48.3	1.000004
100000.0	12.0	-41.9			18.1	592.5	83.2	50.1	1.000004
100500.0	11.8	-41.6			17.7	592.9	84.4	51.3	1.000004
101000.0	11.5	-40.9			17.2	593.8	86.8	51.1	1.000004
101500.0	11.2	-40.2			16.8	594.7	89.1	50.9	1.000004
102000.0	11.0	-39.5			16.4	595.6	91.5	50.9	1.000004
102500.0	10.8	-38.8			16.0	596.4			1.000004
103000.0	10.5	-38.0			15.6	597.3			1.000003
103500.0	10.3	-37.3			15.2	598.2			1.000003
104000.0	10.1	-36.6			14.8	599.1			1.000003
104500.0	9.9	-36.3			14.5	599.5			1.000003
105000.0	9.6	-36.3			14.2	599.6			1.000003

STATION ALTITUDE 4940.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 157

MANDATORY LEVELS  
 211004J157  
 STALLION

WSTM SITE COORDINATES  
 403783.00 FEET E  
 701403.00 FEET N

TABLE XI

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4986.	20.1	13.0	64.	.1	1.9
800.0	6692.	16.8	8.5	58.	12.4	.6
750.0	8495.	15.4	4.8	49.	112.8	3.6
700.0	10400.	10.6	2.7	58.	123.2	5.9
650.0	12414.	6.8	-2.2	53.	151.3	9.1
600.0	14557.	2.7	-7.5	47.	99.7	9.9
550.0	16846.	-2.6	-11.9	49.	101.4	13.7
500.0	19303.	-6.5	-19.8	34.	93.9	15.7
450.0	21983.	-11.5	-27.2	26.	57.4	6.2
400.0	24907.	-18.3	-36.2	19.	66.3	12.2
350.0	28152.	-23.4	-41.5	17.	76.7	21.5
300.0	31784.	-32.7	-49.4	17.00	61.9	24.7
250.0	35908.	-43.0			59.2	20.1
200.0	40718.	-54.7			43.0	6.2
175.0	43481.	-61.0			59.5	9.9
150.0	46578.	-66.5			79.4	15.7
125.0	50192.	-67.3			91.4	15.9
100.0	54585.	-69.4			41.8	8.3
80.0	59011.	-64.2			92.3	17.9
70.0	61712.	-61.1			82.6	11.8
60.0	64881.	-57.3			98.5	20.7
50.0	68682.	-55.9			106.2	15.3
40.0	73371.	-53.0			86.1	22.2
30.0	79507.	-49.3			103.9	20.3
25.0	83460.	-47.0			83.6	23.8
20.0	88313.	-46.6			84.6	36.3
15.0	94613.	-43.9			90.2	36.7
10.0	103648.	-36.4				

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

SIGNIFICANT LEVEL DATA  
 2110020510  
 WHITE SANDS

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185345.00 FEET N

TABLE XII

PRESSURE GEOMETRIC		TEMPERATURE		REL. HUM.
MIL. IBARS	ALTITUDE MSL FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT
881.3	3989.0	23.9	16.4	63.0
850.0	5024.0	20.5	14.2	67.0
828.6	5747.3	18.6	15.7	83.0
756.8	8302.6	17.3	8.7	57.0
700.0	10472.6	11.7	4.2	60.0
606.2	14375.2	3.7	-3.3	60.0
546.6	17113.2	-1.9	-5.9	74.0
539.6	17499.0	-2.3	-7.2	69.0
500.0	19430.2	-5.8	-11.7	63.0
468.8	21083.6	-8.6	-12.5	73.0
454.2	21888.8	-10.1	-17.0	57.0
424.8	23576.0	-13.3	-23.2	43.0
411.0	24401.0	-14.9	-23.9	46.0
400.0	25074.7	-16.4	-21.8	63.0
364.0	27387.5	-21.4	-23.6	82.0
345.8	28627.0	-23.8	-29.5	59.0
332.4	29573.6	-25.8	-37.2	33.0
320.8	30417.8	-27.5	-45.5	16.0
300.0	31993.6	-31.2	-46.6	20.0
275.4	33968.0	-36.5	-46.1	36.0
250.0	36150.1	-42.2	-50.6	39.0
200.0	40995.5	-53.9		
165.0	44975.9	-63.6		
150.0	46891.2	-66.4		
142.8	47877.5	-64.6		
129.4	49845.3	-68.1		
113.4	52456.8	-68.5		
100.0	54950.4	-67.3		
70.0	62179.9	-59.5		
50.0	69191.8	-55.8		

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

SIGNIFICANT LEVEL DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510  
 0950 HRS MDT

TABLE XII (CONT)

PRESSURE GEOMETRIC ALTITUDE		TEMPERATURE	REL. HUM.
MILLIBARS	MSL FEET	AIR DEWPOINT DEGREES CENTIGRADE	PERCENT
30.0	80083.8	-49.8	
23.0	85916.0	-43.3	
20.0	89011.2	-46.0	
13.5	97741.1	-42.1	
10.0	104528.8	-38.0	
8.0	109647.2	-35.8	

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 75  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA		INDEX OF REFRACTION
								SPEED KNOTS	SPEED KNOTS	
3989.0	881.3	23.9	16.4	63.0	1025.2	674.2	.0	.0	1.000339	
4000.0	881.0	23.9	16.4	63.0	1025.0	674.1	109.8	.0	1.000309	
4500.0	865.7	22.2	15.3	65.0	1013.2	672.1	109.8	1.1	1.000302	
5000.0	850.7	20.6	14.2	66.9	1001.7	670.1	109.8	2.1	1.000295	
5500.0	835.9	19.2	15.2	77.5	988.0	668.8	109.8	3.2	1.000297	
6000.0	821.2	18.5	15.0	80.4	973.3	667.9	109.8	4.2	1.000293	
6500.0	806.8	18.2	13.8	75.3	957.5	667.5	117.4	4.9	1.000284	
7000.0	792.6	18.0	12.5	70.3	941.9	667.0	133.4	5.4	1.000275	
7500.0	778.7	17.7	11.1	65.2	926.6	666.6	150.2	5.4	1.000255	
8000.0	765.0	17.5	9.6	60.1	911.6	666.1	168.9	5.6	1.000257	
8500.0	751.4	16.8	8.3	57.3	897.9	665.2	183.1	6.2	1.000250	
9000.0	738.1	15.5	7.3	58.0	886.1	663.6	192.3	7.1	1.000244	
9500.0	724.9	14.2	6.2	58.7	874.4	662.0	196.8	8.1	1.000239	
10000.0	712.0	12.9	5.2	59.3	863.0	660.5	196.4	9.0	1.000233	
10500.0	699.3	11.6	4.2	60.0	851.6	658.9	194.1	9.7	1.000228	
11000.0	686.5	10.6	3.2	60.0	839.2	657.7	189.9	10.0	1.000223	
11500.0	674.0	9.6	2.2	60.0	827.1	656.4	188.7	11.3	1.000218	
12000.0	661.7	8.6	1.3	60.0	815.1	655.1	189.3	12.2	1.000214	
12500.0	649.6	7.5	.3	60.0	803.3	653.9	190.3	13.5	1.000209	
13000.0	637.7	6.5	-.7	60.0	791.6	652.6	191.5	14.6	1.000205	
13500.0	626.1	5.5	-1.6	60.0	780.2	651.4	193.0	14.1	1.000200	
14000.0	614.6	4.5	-2.6	60.0	768.9	650.1	195.2	12.5	1.000196	
14500.0	603.3	3.4	-3.4	50.6	757.6	648.9	196.7	10.9	1.000192	
15000.0	592.1	2.4	-3.8	63.2	746.2	647.7	197.5	9.2	1.000189	
15500.0	581.0	1.4	-4.3	65.8	735.0	646.4	199.6	8.3	1.000185	
16000.0	570.1	.4	-4.8	68.3	724.0	645.2	202.6	8.0	1.000183	
16500.0	559.4	-.6	-5.3	70.9	713.0	644.0	204.7	7.5	1.000180	
17000.0	548.9	-1.7	-5.8	73.4	702.5	642.8	206.6	6.8	1.000177	
17500.0	538.6	-2.3	-7.2	69.0	691.0	641.9	206.6	6.1	1.000172	
18000.0	528.3	-3.2	-8.4	67.4	680.2	640.8	205.2	5.5	1.000168	

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
19500.0	518.2	-4.1	65.9	659.6	639.7	200.1	5.1	1.000155
19000.0	508.4	-5.0	64.3	659.1	638.6	191.1	4.8	1.000151
19500.0	498.6	-5.9	63.4	648.8	637.5	176.7	4.1	1.000158
20000.0	489.0	-6.8	66.4	638.3	636.4	145.1	3.2	1.000155
20500.0	479.6	-7.6	69.5	628.0	635.4	108.2	3.6	1.000153
21000.0	470.3	-8.5	72.5	617.8	634.4	96.2	5.1	1.000150
21500.0	461.2	-9.4	64.7	608.1	633.2	80.7	6.7	1.000146
22000.0	452.2	-10.3	56.1	598.6	632.0	84.2	7.9	1.000142
22500.0	443.3	-11.3	51.9	589.0	630.8	86.5	8.6	1.000139
23000.0	434.6	-12.2	47.8	579.6	629.6	88.0	8.6	1.000135
23500.0	426.1	-13.2	43.6	570.4	628.4	82.1	8.3	1.000132
24000.0	417.7	-14.1	44.5	561.2	627.3	61.4	8.0	1.000130
24500.0	409.4	-15.1	48.5	552.2	626.1	43.2	8.7	1.000128
25000.0	401.2	-16.2	61.1	543.5	624.7	31.4	9.6	1.000127
25500.0	393.1	-17.3	66.5	534.8	623.4	23.1	10.5	1.000125
26000.0	385.2	-18.4	70.6	526.2	622.1	22.8	9.8	1.000123
26500.0	377.4	-19.5	74.7	517.8	620.8	21.9	9.1	1.000121
27000.0	369.8	-20.6	78.8	509.5	619.5	12.7	8.8	1.000119
27500.0	362.3	-21.6	79.9	501.3	618.1	3.0	8.8	1.000117
28000.0	354.9	-22.6	70.6	493.0	616.9	1.5	8.5	1.000114
28500.0	347.6	-23.6	61.4	484.9	615.7	.0	8.2	1.000111
29000.0	340.5	-24.6	48.8	476.9	614.3	7.9	7.7	1.000109
29500.0	333.4	-25.6	35.0	469.2	613.0	17.9	7.3	1.000106
30000.0	326.5	-26.7	24.4	461.3	611.7	27.7	6.6	1.000104
30500.0	319.7	-27.7	16.2	453.7	610.4	39.4	6.1	1.000102
31000.0	313.0	-28.9	17.5	446.2	608.9	54.9	6.3	1.000100
31500.0	306.4	-30.0	18.7	439.0	607.5	68.8	7.1	1.000098
32000.0	299.9	-31.2	20.1	431.8	606.0	76.2	8.0	1.000097
32500.0	293.5	-32.6	24.1	424.9	604.3	79.8	8.9	1.000095
33000.0	287.2	-33.9	28.2	418.1	602.6	83.9	9.6	1.000094

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 75  
 ASCENSION NO. 510  
 0950 HRS MDT

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMP POINT DEGREE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
33500.0	281.0	-35.2	-45.9	32.2	411.5	600.9	89.7	10.2	1.000092
34000.0	275.0	-36.6	-46.1	36.0	404.9	599.2	93.2	10.7	1.000091
34500.0	269.0	-37.9	-47.2	36.7	398.2	597.6	98.3	10.9	1.000089
35000.0	263.1	-39.2	-48.2	37.4	391.7	595.9	102.1	11.3	1.000088
35500.0	257.3	-40.5	-49.2	38.1	385.3	594.2	96.8	12.8	1.000085
36000.0	251.7	-41.8	-50.3	38.8	378.9	592.6	92.6	14.5	1.000085
36500.0	246.0	-43.0	-52.0	36.2**	372.4	591.0	92.5	15.3	1.000083
37000.0	240.4	-44.3	-54.0	32.2**	365.9	589.4	92.9	15.9	1.000082
37500.0	234.9	-45.5	-56.2	28.1**	359.4	587.9	98.4	15.0	1.000090
38000.0	229.6	-46.7	-58.5	24.1**	353.1	586.3	107.2	13.7	1.000079
38500.0	224.4	-47.9	-61.0	20.1**	346.9	584.7	117.2	13.4	1.000077
39000.0	219.3	-49.1	-63.7	16.1**	340.9	583.2	126.9	14.0	1.000075
39500.0	214.3	-50.3	-66.8	12.0**	334.9	581.6	137.7	15.2	1.000075
40000.0	209.4	-51.5	-70.6	8.0**	329.1	580.0	148.4	17.4	1.000073
40500.0	204.6	-52.7	-76.1	4.0**	323.3	578.4	154.4	19.6	1.000072
41000.0	200.0	-53.9			317.7	576.8	156.3	21.3	1.000071
41500.0	195.2	-55.1			311.9	575.2	157.7	22.6	1.000069
42000.0	190.5	-56.3			306.1	573.6	157.7	20.7	1.000058
42500.0	186.0	-57.6			300.5	572.0	157.8	18.9	1.000067
43000.0	181.5	-58.8			295.0	570.4	161.1	15.1	1.000055
43500.0	177.2	-60.0			289.6	568.8	167.6	11.1	1.000065
44000.0	173.0	-61.2			284.3	567.1	172.0	7.5	1.000053
44500.0	168.8	-62.4			279.1	565.5	130.6	5.9	1.000062
45000.0	164.8	-63.6			274.0	563.9	92.2	7.9	1.000051
45500.0	160.8	-64.4			268.2	562.9	84.2	12.5	1.000060
46000.0	156.8	-65.1			262.5	561.9	85.5	17.7	1.000058
46500.0	152.9	-65.8			257.0	560.9	86.4	21.3	1.000057
47000.0	149.2	-66.2			251.1	560.4	88.1	20.6	1.000055
47500.0	145.5	-65.3			243.9	561.7	89.9	19.9	1.000054
48000.0	141.9	-64.8			237.3	562.3	92.1	18.7	1.000053

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
48500.0	138.4	-65.7			232.4	561.1	94.6	17.4	1.000052
49000.0	135.0	-66.6			227.7	559.9	96.3	16.1	1.000051
49500.0	131.7	-67.5			223.0	558.7	96.7	14.7	1.000050
50000.0	128.4	-68.1			218.2	557.8	96.9	13.4	1.000049
50500.0	125.2	-68.2			212.8	557.7	91.8	14.3	1.000047
51000.0	122.1	-68.3			207.6	557.6	87.3	15.2	1.000046
51500.0	119.0	-68.4			202.5	557.5	89.2	15.5	1.000045
52000.0	116.0	-68.4			197.5	557.4	93.7	15.7	1.000044
52500.0	113.2	-68.5			192.6	557.3	93.5	15.1	1.000043
53000.0	110.3	-68.2			187.6	557.7	81.9	13.3	1.000042
53500.0	107.6	-68.0			182.7	558.0	67.5	12.2	1.000041
54000.0	104.9	-67.8			177.9	558.3	54.0	14.2	1.000040
54500.0	102.3	-67.5			173.3	558.7	44.4	16.9	1.000039
55000.0	99.8	-67.2			168.8	559.0	44.2	18.8	1.000038
55500.0	97.3	-66.7			164.2	559.8	48.9	20.2	1.000037
56000.0	95.0	-66.2			159.8	560.5	53.0	21.6	1.000035
56500.0	92.6	-65.6			155.5	561.2	58.4	21.1	1.000035
57000.0	90.4	-65.1			151.3	561.9	64.5	20.4	1.000034
57500.0	88.2	-64.5			147.3	562.7	70.9	20.0	1.000033
58000.0	86.0	-64.0			143.3	563.4	84.1	17.9	1.000032
58500.0	83.9	-63.5			139.5	564.1	100.2	16.8	1.000031
59000.0	81.9	-62.9			135.7	564.8	116.1	17.1	1.000030
59500.0	79.9	-62.4			132.1	565.6	117.1	17.1	1.000029
60000.0	77.9	-61.9			128.5	566.3	118.2	17.1	1.000029
60500.0	76.0	-61.3			125.1	567.0	117.0	17.1	1.000028
61000.0	74.2	-60.8			121.7	567.7	109.1	17.2	1.000027
61500.0	72.4	-60.2			118.4	568.5	101.5	17.7	1.000025
62000.0	70.6	-59.7			115.3	569.2	97.7	17.9	1.000026
62500.0	68.9	-59.3			112.3	569.7	98.5	17.6	1.000025
63000.0	67.3	-59.1			109.5	570.0	99.4	17.3	1.000024

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
63500.0	65.7	-58.8		105.8	570.4	99.7	16.6	1.000024
64000.0	64.1	-58.5		104.1	570.7	99.7	15.8	1.000023
64500.0	62.6	-58.3		101.5	571.1	99.8	14.9	1.000023
65000.0	61.1	-58.0		99.0	571.4	96.3	15.3	1.000022
65500.0	59.7	-57.7		96.5	571.8	92.6	15.9	1.000022
66000.0	58.3	-57.5		94.1	572.1	89.5	16.7	1.000021
66500.0	56.9	-57.2		91.8	572.5	88.6	17.6	1.000020
67000.0	55.5	-57.0		89.5	572.8	87.8	18.5	1.000020
67500.0	54.2	-56.7		87.3	573.2	88.4	19.2	1.000019
68000.0	52.9	-56.4		85.1	573.5	91.1	19.4	1.000019
68500.0	51.7	-56.2		83.0	573.9	93.7	19.6	1.000018
69000.0	50.5	-55.9		80.9	574.2	94.7	19.9	1.000018
69500.0	49.3	-55.6		78.9	574.6	94.1	20.3	1.000018
70000.0	48.1	-55.4		77.0	574.9	93.6	20.6	1.000017
70500.0	47.0	-55.1		75.1	575.3	93.3	21.0	1.000017
71000.0	45.9	-54.8		73.3	575.7	93.2	21.5	1.000015
71500.0	44.9	-54.5		71.5	576.0	93.1	22.0	1.000016
72000.0	43.8	-54.3		69.8	576.4	93.4	22.4	1.000015
72500.0	42.8	-54.0		68.1	576.8	94.1	22.7	1.000015
73000.0	41.8	-53.7		66.4	577.1	94.7	23.0	1.000015
73500.0	40.9	-53.4		64.8	577.5	94.9	23.4	1.000014
74000.0	39.9	-53.2		63.2	577.8	94.8	23.8	1.000014
74500.0	39.0	-52.9		61.6	578.2	94.7	24.2	1.000014
75000.0	38.1	-52.6		60.1	578.6	94.8	24.6	1.000013
75500.0	37.2	-52.3		58.7	578.9	95.0	24.8	1.000013
76000.0	36.3	-52.0		57.2	579.3	95.2	25.0	1.000013
76500.0	35.5	-51.8		55.8	579.6	95.5	25.2	1.000012
77000.0	34.7	-51.5		54.5	580.0	96.1	25.3	1.000012
77500.0	33.9	-51.2		53.2	580.4	96.7	25.3	1.000012
78000.0	33.1	-50.9		51.9	580.7	97.3	25.4	1.000012

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE	PRESSURE	TEMPERATURE	REL. HUM.	DENSITY	SPEED OF	WIND DATA	INDEX
MSL FEET	MILLIBARS	AIR DEWPOINT	PERCENT	GM/CUBIC	SOUND	DIRECTION	OF
		DEGREES		METER	KNOTS	DEGREES(TN)	REFRACTION
		CENTIGRADE					
78500.0	32.3	-50.7		50.6	581.1	97.5	1.000011
79000.0	31.6	-50.4		49.4	581.4	97.7	1.000011
79500.0	30.8	-50.1		48.2	581.8	98.0	1.000011
80000.0	30.1	-49.8		47.0	582.2	96.8	1.000010
80500.0	29.4	-49.3		45.8	582.8	95.5	1.000010
81000.0	28.8	-48.8		44.7	583.6	94.1	1.000010
81500.0	28.1	-48.2		43.6	584.3	94.0	1.000010
82000.0	27.5	-47.7		42.5	585.0	94.3	1.000009
82500.0	26.9	-47.1		41.4	585.7	94.6	1.000009
83000.0	26.3	-46.5		40.4	586.4	94.5	1.000009
83500.0	25.7	-46.0		39.4	587.2	94.3	1.000009
84000.0	25.1	-45.4		38.4	587.9	94.1	1.000009
84500.0	24.5	-44.9		37.4	588.6	92.0	1.000008
85000.0	24.0	-44.3		36.5	589.3	89.6	1.000008
85500.0	23.4	-43.8		35.6	590.0	87.2	1.000008
86000.0	22.9	-43.4		34.7	590.5	84.1	1.000008
86500.0	22.4	-43.8		34.0	590.0	81.0	1.000008
87000.0	21.9	-44.2		33.3	589.4	78.0	1.000007
87500.0	21.4	-44.7		32.6	588.9	76.0	1.000007
88000.0	20.9	-45.1		32.0	588.3	74.3	1.000007
88500.0	20.5	-45.6		31.3	587.7	72.6	1.000007
89000.0	20.0	-46.0		30.7	587.2	73.7	1.000007
89500.0	19.6	-45.8		30.0	587.4	75.0	1.000007
90000.0	19.1	-45.6		29.3	587.7	76.2	1.000007
90500.0	18.7	-45.3		28.6	588.0	76.6	1.000006
91000.0	18.3	-45.1		27.9	588.3	76.9	1.000006
91500.0	17.9	-44.9		27.3	588.6	77.2	1.000006
92000.0	17.5	-44.7		26.7	588.9	78.0	1.000006
92500.0	17.1	-44.4		26.0	589.2	78.7	1.000006
93000.0	16.7	-44.2		25.4	589.5	79.3	1.000006

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76 0950 HRS MDT  
 ASCENSION NO. 510

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
93500.0	16.3	-44.0		24.8	589.7	80.3	35.4	1.000006
94000.0	16.0	-43.8		24.3	590.0	81.5	35.8	1.000005
94500.0	15.6	-43.5		23.7	590.3	82.7	36.2	1.000005
95000.0	15.3	-43.3		23.2	590.6	83.9	36.7	1.000005
95500.0	14.9	-43.1		22.6	590.9	84.3	37.7	1.000005
96000.0	14.6	-42.9		22.1	591.2	84.5	39.1	1.000005
96500.0	14.3	-42.7		21.6	591.5	84.6	40.4	1.000005
97000.0	14.0	-42.4		21.1	591.7	84.8	41.8	1.000005
97500.0	13.6	-42.2		20.6	592.0	86.4	41.8	1.000005
98000.0	13.3	-41.9		20.1	592.4	88.1	41.8	1.000004
98500.0	13.1	-41.6		19.6	592.8	89.9	41.8	1.000004
99000.0	12.8	-41.3		19.2	593.1	91.7	42.2	1.000004
99500.0	12.5	-41.0		18.7	593.5	93.9	44.3	1.000004
100000.0	12.2	-40.7		18.3	593.9	96.0	46.5	1.000004
100500.0	11.9	-40.4		17.9	594.3	97.9	48.7	1.000004
101000.0	11.7	-40.1		17.5	594.7	99.2	50.1	1.000004
101500.0	11.4	-39.8		17.1	595.1	99.8	50.1	1.000004
102000.0	11.2	-39.5		16.7	595.5	100.5	50.2	1.000004
102500.0	10.9	-39.2		16.3	595.8	101.1	50.2	1.000004
103000.0	10.7	-38.9		15.9	596.2	101.3	48.6	1.000004
103500.0	10.5	-38.6		15.5	596.6	101.1	45.6	1.000003
104000.0	10.2	-38.3		15.2	597.0	100.9	42.6	1.000003
104500.0	10.0	-38.0		14.8	597.4	100.6	39.6	1.000003
105000.0	9.8	-37.8		14.5	597.7	99.8	41.1	1.000003
105500.0	9.6	-37.6		14.2	597.9	99.0	44.1	1.000003
106000.0	9.4	-37.4		13.9	598.2	98.2	47.2	1.000003
106500.0	9.2	-37.2		13.5	598.5	97.6	50.3	1.000003
107000.0	9.0	-36.9		13.2	598.8			1.000003
107500.0	8.8	-36.7		12.9	599.0			1.000003
108000.0	8.6	-36.5		12.7	599.3			1.000003

UPPER AIR DATA  
 2110020510  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 510

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

TABLE XIII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNCITS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
108500.0	8.4	-36.3			12.4	599.6			1.000003
109000.0	8.2	-36.1			12.1	599.8			1.000003
109500.0	8.1	-35.9			11.8	600.1			1.000003

STATION ALTITUDE 3989.00 FEET MSL  
 29 JULY 75 0950 HRS MDT  
 ASCENSION NO. 510

MANDATORY LEVELS  
 2110020510  
 WHITE SANDS

KSTM SITE COORDINATES  
 480580.00 FEET E  
 185045.00 FEET N

TABLE XIV

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5022.	20.5	14.2	67.	109.8	2.2
800.0	6737.	18.1	13.2	73.	125.5	5.1
750.0	8551.	16.7	8.2	57.	184.2	6.3
700.0	10466.	11.7	4.2	60.	194.4	9.7
650.0	12488.	7.6	.3	60.	190.3	13.5
600.0	14638.	3.1	-3.5	61.	196.9	10.4
550.0	16935.	-1.6	-5.7	73.	206.4	6.8
500.0	19409.	-5.8	-11.7	63.	180.0	4.3
450.0	22097.	-10.5	-17.8	55.	84.9	8.2
400.0	25040.	-16.4	-21.8	63.	29.9	9.7
350.0	28293.	-23.2	-28.0	64.	.5	8.3
300.0	31939.	-31.2	-46.6	20.	76.1	8.0
250.0	36081.	-42.2	-50.6	39.	92.3	14.8
200.0	40908.	-53.9			156.2	21.2
175.0	43678.	-60.6			173.4	9.1
150.0	46778.	-66.4			87.7	20.8
125.0	50400.	-68.2			91.6	14.3
100.0	54797.	-67.3			43.6	18.7
80.0	59263.	-62.4			117.0	17.1
70.0	61986.	-59.5			98.0	17.8
60.0	65164.	-57.8			93.6	15.7
50.0	68954.	-55.8			94.5	20.0
40.0	73643.	-53.2			94.8	23.7
30.0	79771.	-49.8			96.6	26.2
25.0	83724.	-45.3			94.1	27.3
20.0	88626.	-46.0			73.7	31.3
15.0	94945.	-43.1			84.3	37.4
10.0	104002.	-38.0			100.6	39.5

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195  
 1000 HRS MDT

SIGNIFICANT LEVEL DATA  
 2110030195  
 JALLEN

#STM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XV

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE		TEMPERATURE		REL. HUM. PERCENT
	MSL FEET	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	
878.2	4051.0		23.9	17.4	67.0
868.5	4369.3		21.0	15.1	69.0
850.2	4974.6		19.5	13.9	70.0
840.8	5289.2		18.5	13.8	74.0
816.8	6106.1		18.1	9.7	58.0
741.8	8801.4		14.5	5.6	55.0
699.9	10407.5		11.0	2.3	55.0
614.8	13917.0		3.5	-2.7	64.0
587.8	15110.9		.5	-2.4	81.0
569.8	15932.2		.1	-4.0	74.0
550.2	16851.7		-2.3	-5.1	81.0
544.3	17133.6		-2.5	-7.0	71.0
525.8	18034.6		-3.9	-7.5	76.0
499.9	19337.9		-7.7	-11.3	75.0
484.8	20122.5		-8.1	-22.6	30.0
477.3	20520.3		-9.0	-16.1	56.0
461.8	21358.9		-10.4	-23.9	32.0
439.3	22618.8		-12.6	-22.0	45.0
425.3	23429.5		-14.5	-20.9	58.0
409.8	24352.8		-16.0	-24.9	46.0
400.2	24938.8		-17.5	-28.1	39.0
374.8	26546.2		-20.2	-38.3	18.0
361.8	27402.3		-22.9	-41.1	17.0
336.8	29121.3		-25.3	-42.6	18.0
300.3	31822.4		-32.5	-48.7	18.0
249.8	36004.4		-42.7		
200.1	40809.6		-54.5		
178.3	43210.7		-60.4		
149.9	46710.0		-68.0		
133.3	49041.7		-66.8		

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195  
 1000 HRS MDT

SIGNIFICANT LEVEL DATA  
 21100JUL195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XV (CONT)

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
108.3 53145.9	-70.3	
100.1 54690.6	-69.9	
70.0 61876.3	-60.6	
50.0 68850.5	-57.0	
30.0 79692.7	-50.6	
20.0 88523.6	-46.0	
13.3 97572.7	-42.7	
11.8 100278.6	-37.5	
10.0 104064.1	-37.5	

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195

UPPER AIR DATA  
 21100J0195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA	INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE					
4051.0	878.2	23.9	17.4	67.0	1021.1	674.3	.0	1.000313
4500.0	864.5	20.7	14.8	69.2	1017.4	670.3	57.0	1.000301
5000.0	849.4	19.4	13.9	70.3	1004.3	668.7	57.0	1.000294
5500.0	834.5	18.4	12.8	69.9	990.5	667.4	57.0	1.000287
6000.0	819.9	18.2	10.3	60.1	974.8	668.8	57.0	1.000273
6500.0	805.4	17.6	9.1	57.6	957.8	668.1	112.3	1.000266
7000.0	791.1	16.9	8.3	57.0	945.2	665.2	172.3	1.000260
7500.0	777.1	16.2	7.6	56.4	930.7	664.4	181.3	1.000255
8000.0	763.3	15.6	6.8	55.9	915.5	663.6	184.3	1.000249
8500.0	749.8	14.9	6.0	55.3	902.5	662.8	185.9	1.000244
9000.0	736.5	14.1	5.2	55.0	889.2	661.7	187.0	1.000239
9500.0	723.3	13.0	4.2	55.0	876.8	660.4	193.0	1.000233
10000.0	710.3	11.9	3.1	55.0	864.6	659.1	196.2	1.000228
10500.0	697.5	10.8	2.2	55.2	852.4	657.8	199.2	1.000224
11000.0	684.8	9.7	1.5	56.5	840.1	656.5	199.2	1.000219
11500.0	672.2	8.7	.8	57.8	827.9	655.2	197.2	1.000215
12000.0	659.9	7.6	.1	59.1	816.0	653.9	194.2	1.000211
12500.0	647.8	6.5	-.6	60.4	804.2	652.6	193.7	1.000208
13000.0	636.0	5.5	-1.3	61.6	792.6	651.3	194.7	1.000204
13500.0	624.4	4.4	-2.0	62.9	781.2	650.1	194.5	1.000200
14000.0	612.9	3.3	-2.6	65.2	770.0	648.7	192.6	1.000197
14500.0	601.5	2.0	-2.4	72.3	759.0	647.3	183.3	1.000195
15000.0	590.3	.8	-2.4	79.4	745.2	645.8	181.3	1.000193
15500.0	579.2	.3	-3.1	77.7	735.5	645.3	176.6	1.000188
16000.0	568.3	-.1	-4.0	74.5	722.8	644.7	176.7	1.000184
16500.0	557.6	-1.4	-4.7	78.3	712.7	643.2	176.6	1.000181
17000.0	547.1	-2.4	-6.1	75.7	702.0	641.9	174.4	1.000176
17500.0	536.7	-3.1	-7.2	73.0	690.5	641.0	171.8	1.000172
18000.0	526.5	-3.8	-7.5	75.8	679.4	640.1	160.9	1.000170
18500.0	516.4	-5.3	-8.9	75.6	670.0	638.4	149.9	1.000166

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76 1000 HRS MDT  
 ASCENSION NO. 195

UPPER AIR DATA  
 2110030195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
19000.0	506.5	-6.7	75.3	660.9	636.6	126.9	7.3	1.000162
19500.0	496.7	-7.8	65.7	651.0	635.2	110.7	9.5	1.000157
20000.0	487.1	-8.0	37.0	639.5	634.6	101.8	11.6	1.000149
20500.0	477.7	-9.0	54.7	629.0	633.6	95.8	13.7	1.000149
21000.0	468.4	-9.8	42.3	619.0	632.5	94.4	14.2	1.000145
21500.0	459.2	-10.6	33.5	609.0	631.4	94.5	13.2	1.000141
22000.0	450.2	-11.5	38.6	599.0	630.4	91.7	12.5	1.000139
22500.0	441.4	-12.4	43.8	589.1	629.4	89.1	10.8	1.000137
23000.0	432.7	-13.5	51.1	579.9	628.1	77.1	9.3	1.000135
23500.0	424.1	-14.6	57.1	570.9	626.7	63.6	8.2	1.000134
24000.0	415.7	-15.4	50.6	561.4	625.7	51.2	7.4	1.000130
24500.0	407.4	-16.4	44.2	552.3	624.5	45.3	6.3	1.000127
25000.0	399.2	-17.6	38.2	543.9	622.9	36.4	5.4	1.000125
25500.0	391.1	-18.4	31.7	534.7	621.9	40.3	5.2	1.000122
26000.0	383.2	-19.3	25.1	525.7	620.8	42.2	5.0	1.000119
26500.0	375.5	-20.1	18.6	516.9	619.8	57.2	6.2	1.000116
27000.0	367.9	-21.6	17.5	509.4	617.9	67.1	7.9	1.000115
27500.0	360.3	-23.0	17.1	501.8	616.2	74.3	9.9	1.000113
28000.0	352.9	-23.7	17.3	492.6	615.3	79.3	12.1	1.000111
28500.0	345.6	-24.4	17.6	484.0	614.4	81.8	14.1	1.000109
29000.0	338.5	-25.1	17.9	475.4	613.6	82.9	16.0	1.000107
29500.0	331.4	-26.3	18.0	467.7	612.1	82.0	17.1	1.000105
30000.0	324.5	-27.6	18.0	460.3	610.5	77.7	17.0	1.000103
30500.0	317.6	-29.0	18.0	453.1	608.8	73.3	17.1	1.000102
31000.0	311.0	-30.3	18.0	446.1	607.1	68.7	17.6	1.000100
31500.0	304.4	-31.6	18.0	439.1	605.5	64.4	18.3	1.000098
32000.0	298.0	-32.9	17.2**	432.1	603.8	62.3	18.3	1.000097
32500.0	291.5	-34.2	15.1**	424.8	602.3	60.4	18.2	1.000095
33000.0	285.1	-35.4	12.9**	417.7	600.7	60.8	17.8	1.000093
33500.0	278.9	-36.6	10.8**	410.7	599.2	62.5	17.1	1.000092

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA  
 211000Z0195  
 JALLEN

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
34000.0	272.8	-37.8	-59.1	8.6**	403.9	597.7	64.9	16.2	1.000090
34500.0	266.9	-39.0	-62.2	6.5**	397.1	596.1	66.6	15.1	1.000089
35000.0	261.1	-40.3	-66.1	4.3**	390.5	594.5	72.8	14.0	1.000087
35500.0	255.4	-41.5	-71.6	2.2**	384.0	593.0	73.3	13.2	1.000086
36000.0	249.8	-42.7	-79.0	.0**	377.7	591.4	73.8	12.4	1.000084
36500.0	244.1	-43.9			371.0	589.8	74.2	12.2	1.000083
37000.0	238.6	-45.1			364.5	588.3	74.5	12.0	1.000081
37500.0	233.1	-46.4			358.1	586.7	79.3	11.4	1.000080
38000.0	227.8	-47.6			351.9	585.1	87.0	10.6	1.000078
38500.0	222.6	-48.8			345.7	583.5	96.0	10.2	1.000077
39000.0	217.5	-50.1			339.7	581.9	112.5	10.4	1.000076
39500.0	212.6	-51.3			333.8	580.3	127.0	11.4	1.000074
40000.0	207.7	-52.5			328.0	578.7	135.9	12.5	1.000073
40500.0	203.0	-53.7			322.3	577.1	140.5	13.1	1.000072
41000.0	198.3	-55.0			316.6	575.4	144.7	13.7	1.000071
41500.0	193.6	-56.2			310.8	573.8	141.9	11.8	1.000069
42000.0	189.0	-57.4			305.2	572.2	137.6	9.9	1.000068
42500.0	184.5	-58.7			299.6	570.6	131.7	8.7	1.000067
43000.0	180.1	-59.9			294.2	568.9	124.9	8.1	1.000066
43500.0	175.8	-61.0			288.6	567.4	114.7	7.6	1.000064
44000.0	171.5	-62.1			283.0	565.9	86.8	7.6	1.000063
44500.0	167.3	-63.2			277.5	564.5	64.0	9.2	1.000062
45000.0	163.2	-64.3			272.1	563.0	55.6	11.0	1.000061
45500.0	159.2	-65.4			266.9	561.6	51.7	12.8	1.000059
46000.0	155.3	-66.5			261.7	560.1	51.2	14.4	1.000058
46500.0	151.5	-67.5			256.6	558.6	59.7	15.6	1.000057
47000.0	147.7	-67.9			250.7	558.2	66.8	17.1	1.000056
47500.0	144.1	-67.6			244.1	558.5	72.0	18.0	1.000054
48000.0	140.5	-67.3			237.8	558.9	76.3	18.1	1.000053
48500.0	137.0	-67.1			231.6	559.2	80.4	18.3	1.000052

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA  
 2110030195  
 JALLEN

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA		INDEX OF REFRACTION
							SPEED KNOTS	SPEED KNOTS	
49000.0	133.6	-60.8		225.5	559.6	64.3	18.5	1.000050	
49500.0	130.2	-67.2		220.3	559.1	80.0	18.6	1.000049	
50000.0	127.0	-67.6		215.2	558.5	91.5	19.2	1.000048	
50500.0	123.8	-68.0		210.3	557.9	92.0	20.0	1.000047	
51000.0	120.7	-68.5		205.5	557.4	91.3	21.1	1.000046	
51500.0	117.7	-68.9		200.8	556.8	90.7	22.1	1.000045	
52000.0	114.8	-69.3		196.1	556.2	89.2	20.4	1.000044	
52500.0	111.9	-69.7		191.6	555.6	87.3	18.5	1.000043	
53000.0	109.1	-70.2		187.3	555.0	84.2	16.5	1.000042	
53500.0	106.4	-70.2		182.6	555.0	70.7	14.0	1.000041	
54000.0	103.7	-70.1		177.9	555.2	53.0	12.6	1.000040	
54500.0	101.1	-69.9		173.3	555.3	39.5	12.9	1.000039	
55000.0	98.6	-69.5		168.6	556.0	41.9	14.6	1.000038	
55500.0	96.1	-68.9		163.9	556.8	43.8	16.2	1.000037	
56000.0	93.8	-68.2		159.4	557.7	47.9	17.3	1.000035	
56500.0	91.5	-67.6		155.0	558.6	56.0	17.5	1.000035	
57000.0	89.2	-66.9		150.7	559.5	63.8	18.2	1.000034	
57500.0	87.0	-66.3		146.6	560.4	69.9	18.1	1.000033	
58000.0	84.9	-65.6		142.5	561.2	75.3	17.3	1.000032	
58500.0	82.8	-65.0		138.6	562.1	80.8	16.7	1.000031	
59000.0	80.8	-64.3		134.7	563.0	83.4	16.5	1.000030	
59500.0	78.8	-63.7		131.0	563.8	86.0	16.3	1.000029	
60000.0	76.9	-63.0		127.4	564.7	88.5	15.5	1.000028	
60500.0	75.0	-62.4		123.9	565.6	91.3	14.3	1.000028	
61000.0	73.1	-61.7		120.5	566.5	95.2	13.4	1.000027	
61500.0	71.3	-61.1		117.2	567.3	103.5	14.4	1.000026	
62000.0	69.6	-60.5		114.0	568.1	110.5	15.6	1.000025	
62500.0	67.9	-60.3		111.2	568.4	112.2	16.9	1.000025	
63000.0	66.3	-60.0		108.4	568.7	110.0	18.3	1.000024	
63500.0	64.7	-59.8		105.7	569.1	108.1	19.7	1.000024	

UPPER AIR DATA  
2110030195  
JALLEH

STATION ALTITUDE 4051.00 FEET MSL  
29 JULY 76  
ASCENSION NO. 195  
1000 HRS MDT

WSTM SITE COORDINATES  
450491.60 FEET E  
464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
64000.0	63.2	-59.5		105.0	569.4	105.0	19.4	1.000023
64500.0	61.7	-59.2		101.5	569.8	101.5	19.0	1.000022
65000.0	60.2	-59.0		97.9	570.1	98.6	18.8	1.000022
65500.0	58.8	-58.7		95.5	570.5	98.2	19.5	1.000021
66000.0	57.4	-58.5		93.1	570.8	97.7	20.2	1.000021
66500.0	56.0	-58.2		90.8	571.2	97.7	20.1	1.000020
67000.0	54.7	-58.0		86.5	571.5	97.9	19.8	1.000020
67500.0	53.4	-57.7		80.3	571.8	96.3	19.3	1.000019
68000.0	52.1	-57.4		84.1	572.2	93.5	18.2	1.000019
68500.0	50.9	-57.2		82.0	572.5	100.9	17.0	1.000018
69000.0	49.6	-56.9		80.0	572.9	101.1	17.1	1.000018
69500.0	48.5	-56.6		78.0	573.3	100.6	17.8	1.000017
70000.0	47.4	-56.3		76.1	573.7	100.2	18.5	1.000017
70500.0	46.3	-56.0		74.2	574.0	100.6	18.4	1.000017
71000.0	45.2	-55.7		72.4	574.4	101.1	18.4	1.000016
71500.0	44.1	-55.4		70.6	574.8	101.3	18.3	1.000016
72000.0	43.1	-55.1		68.9	575.2	101.1	18.2	1.000015
72500.0	42.1	-54.8		67.2	575.6	100.9	18.1	1.000015
73000.0	41.1	-54.6		65.5	576.0	100.4	17.9	1.000015
73500.0	40.2	-54.3		63.9	576.4	99.6	17.5	1.000014
74000.0	39.2	-54.0		62.3	576.8	98.7	17.1	1.000014
74500.0	38.3	-53.7		60.8	577.2	98.6	17.7	1.000014
75000.0	37.4	-53.4		59.3	577.5	98.5	18.4	1.000013
75500.0	36.6	-53.1		57.9	577.9	98.4	19.2	1.000013
76000.0	35.7	-52.8		56.4	578.3	98.4	20.5	1.000013
76500.0	34.9	-52.5		55.0	578.7	98.5	21.7	1.000012
77000.0	34.1	-52.2		53.7	579.1	98.4	22.5	1.000012
77500.0	33.3	-51.9		52.4	579.5	98.2	22.7	1.000012
78000.0	32.5	-51.6		51.1	579.9	98.0	22.8	1.000011
78500.0	31.7	-51.3		49.8	580.3	98.1	23.1	1.000011

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195  
 1000 HRS MDT

UPPER AIR DATA  
 2110030195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
79000.0	31.0	-51.0		40.6	580.6	98.4	23.4	1.000011
79500.0	30.3	-50.7		47.4	581.0	98.7	23.7	1.000011
80000.0	29.6	-50.4		40.3	581.4	96.0	24.1	1.000010
80500.0	28.9	-50.2		45.2	581.7	97.0	24.5	1.000010
81000.0	28.3	-49.9		44.1	582.1	96.1	24.9	1.000010
81500.0	27.6	-49.7		43.0	582.4	93.8	25.5	1.000010
82000.0	27.0	-49.4		42.0	582.7	91.5	26.2	1.000009
82500.0	26.4	-49.1		41.0	583.1	89.2	27.0	1.000009
83000.0	25.8	-48.9		40.0	583.4	85.2	27.0	1.000009
83500.0	25.2	-48.6		39.1	583.8	81.1	27.1	1.000009
84000.0	24.6	-48.4		38.1	584.1	77.0	27.4	1.000008
84500.0	24.1	-48.1		37.2	584.4	75.0	28.6	1.000008
85000.0	23.5	-47.8		36.4	584.8	73.1	29.8	1.000008
85500.0	23.0	-47.6		35.5	585.1	71.4	31.1	1.000008
86000.0	22.5	-47.3		34.6	585.5	74.5	32.1	1.000008
86500.0	21.9	-47.1		33.8	585.8	77.6	33.3	1.000008
87000.0	21.4	-46.8		33.0	586.1	80.5	34.5	1.000007
87500.0	21.0	-46.5		32.2	586.5	82.3	34.5	1.000007
88000.0	20.5	-46.3		31.5	586.8	83.9	34.2	1.000007
88500.0	20.0	-46.0		30.7	587.1	85.5	33.9	1.000007
89000.0	19.6	-45.8		30.0	587.4	85.4	34.2	1.000007
89500.0	19.1	-45.6		29.3	587.6	84.5	34.7	1.000007
90000.0	18.7	-45.5		28.6	587.8	83.6	35.2	1.000006
90500.0	18.3	-45.3		28.0	588.1	84.8	35.8	1.000006
91000.0	17.9	-45.1		27.3	588.3	87.7	36.7	1.000006
91500.0	17.5	-44.9		26.7	588.6	90.4	37.6	1.000006
92000.0	17.1	-44.7		26.1	588.8	93.1	38.4	1.000006
92500.0	16.7	-44.5		25.5	589.0	95.8	39.1	1.000006
93000.0	16.3	-44.4		24.9	589.3	98.4	39.8	1.000006
93500.0	16.0	-44.2		24.3	589.5	99.9	40.6	1.000005

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195  
 1000 HRS MDT

UPPER AIR DATA  
 21100J0195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
94000.0	15.6	-44.0			25.6	509.7	97.2	41.0	1.000005
94500.0	15.3	-43.8			25.2	500.0	94.6	41.6	1.000005
95000.0	14.9	-43.6			24.7	500.2	92.1	42.3	1.000005
95500.0	14.6	-43.5			24.1	500.4	89.3	42.7	1.000005
96000.0	14.3	-43.3			21.6	500.7	85.7	43.2	1.000005
96500.0	14.0	-43.1			21.1	500.9	84.1	43.8	1.000005
97000.0	13.6	-42.9			20.6	501.1	83.5	43.8	1.000005
97500.0	13.3	-42.7			20.2	501.4	83.2	43.5	1.000004
98000.0	13.1	-41.9			19.7	502.5	83.0	43.5	1.000004
98500.0	12.8	-40.9			19.1	503.7	83.7	43.8	1.000004
99000.0	12.5	-40.0			16.7	504.9	84.8	44.4	1.000004
99500.0	12.2	-39.0			16.2	505.1	85.9	45.0	1.000004
100000.0	11.9	-38.0			17.7	507.4	87.0	45.5	1.000004
100500.0	11.7	-37.5			17.3	508.0	91.6	45.2	1.000004
101000.0	11.4	-37.5			16.9	508.0	93.1	46.3	1.000004
101500.0	11.2	-37.5			16.5	508.0	96.5	46.9	1.000004
102000.0	10.9	-37.5			16.2	508.0			1.000004
102500.0	10.7	-37.5			15.8	508.0			1.000004
103000.0	10.5	-37.5			15.5	508.0			1.000003
103500.0	10.2	-37.5			15.2	508.0			1.000003
104000.0	10.0	-37.5			14.8	508.0			1.000003

STATION ALTITUDE 4051.00 FEET MSL  
 29 JULY 76  
 ASCENSION NO. 195

MANDATORY LEVELS  
 21100J0195  
 JALLEN

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

TABLE XVII

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
650.0	4980.	19.5	13.9	70.	57.0	.9
600.0	6688.	17.3	8.0	57.	145.1	1.2
750.0	8491.	14.9	6.1	55.	185.9	6.0
700.0	10397.	11.0	2.5	55.	199.2	11.3
650.0	12413.	6.7	-1.5	60.	193.8	10.2
600.0	14554.	1.9	-2.4	73.	167.0	5.6
550.0	16845.	-2.3	-5.2	81.	175.1	6.8
500.0	19312.	-7.7	-11.5	75.	115.3	8.7
450.0	21986.	-11.5	-22.7	39.	91.0	12.5
400.0	24917.	-17.5	-28.1	39.	38.5	5.4
350.0	28157.	-24.0	-41.8	17.	80.7	13.0
300.0	31791.	-32.6	-48.0	16.**	62.9	18.3
250.0	35918.	-42.7	-92.0	0.**	73.8	12.5
200.0	40733.	-54.5			143.2	13.5
175.0	43495.	-61.2			110.0	7.5
150.0	46585.	-68.0			62.5	16.1
125.0	50190.	-67.9			92.5	19.6
100.0	54558.	-69.9			40.0	13.6
80.0	58979.	-64.1			84.1	16.4
70.0	61684.	-60.6			108.8	15.2
60.0	64845.	-59.0			98.0	18.9
50.0	68615.	-57.0			101.5	16.8
40.0	73280.	-54.2			99.5	17.4
30.0	79383.	-50.6			98.0	23.9
25.0	83301.	-48.5			80.0	27.2
20.0	88144.	-46.0			85.0	33.9
15.0	94456.	-43.7			92.6	42.1
10.0	103543.	-37.5				

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.