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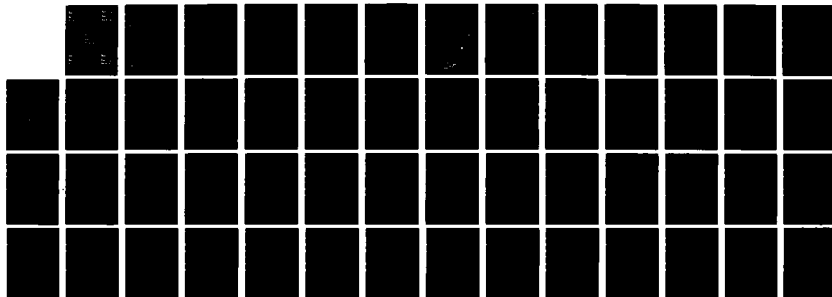
20405A ASSAULT BREAKER MISSILE NUMBER 0010 ROUND NUMBER
M8(U) ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND
WSMR NM ATM. D C KELLER 02 SEP 82 ERADCOM/ASL-DR-1256

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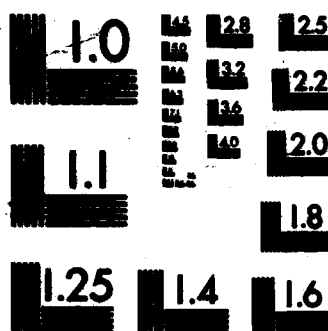
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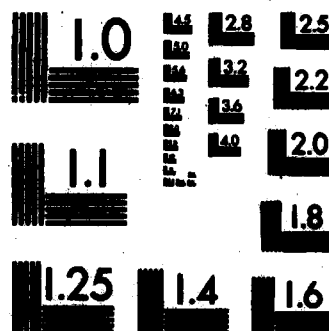
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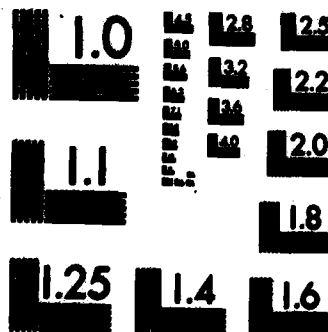
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



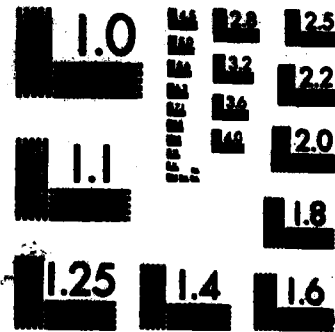
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MICROCOPY RESOLUTION TEST CHART
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MICROCOPY RESOLUTION TEST CHART
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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DR 1256
Sep 82
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METFOROLOGICAL DATA REPORT
20405A Assault Breaker
Missile Number 0010
Round Number M8
2 September 1982

by

DONALD C. KELLER
Program Support Coordinator
Phone Number (505) 679-9568
AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

SEP 10 1982

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 20405A Assault Breaker, Missile Number 0010, Round Number M8 are presented in tabular form.		

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INTRODUCTION

20405A Assault Breaker, Missile Number 0010, Round Number M8, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0923 MDT on 02 September 1982. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes, and the Jallen Met Site at 0900, 0923, and 0953 MDT.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Pilot Balloon observations at:

SITE AND ALTITUDE

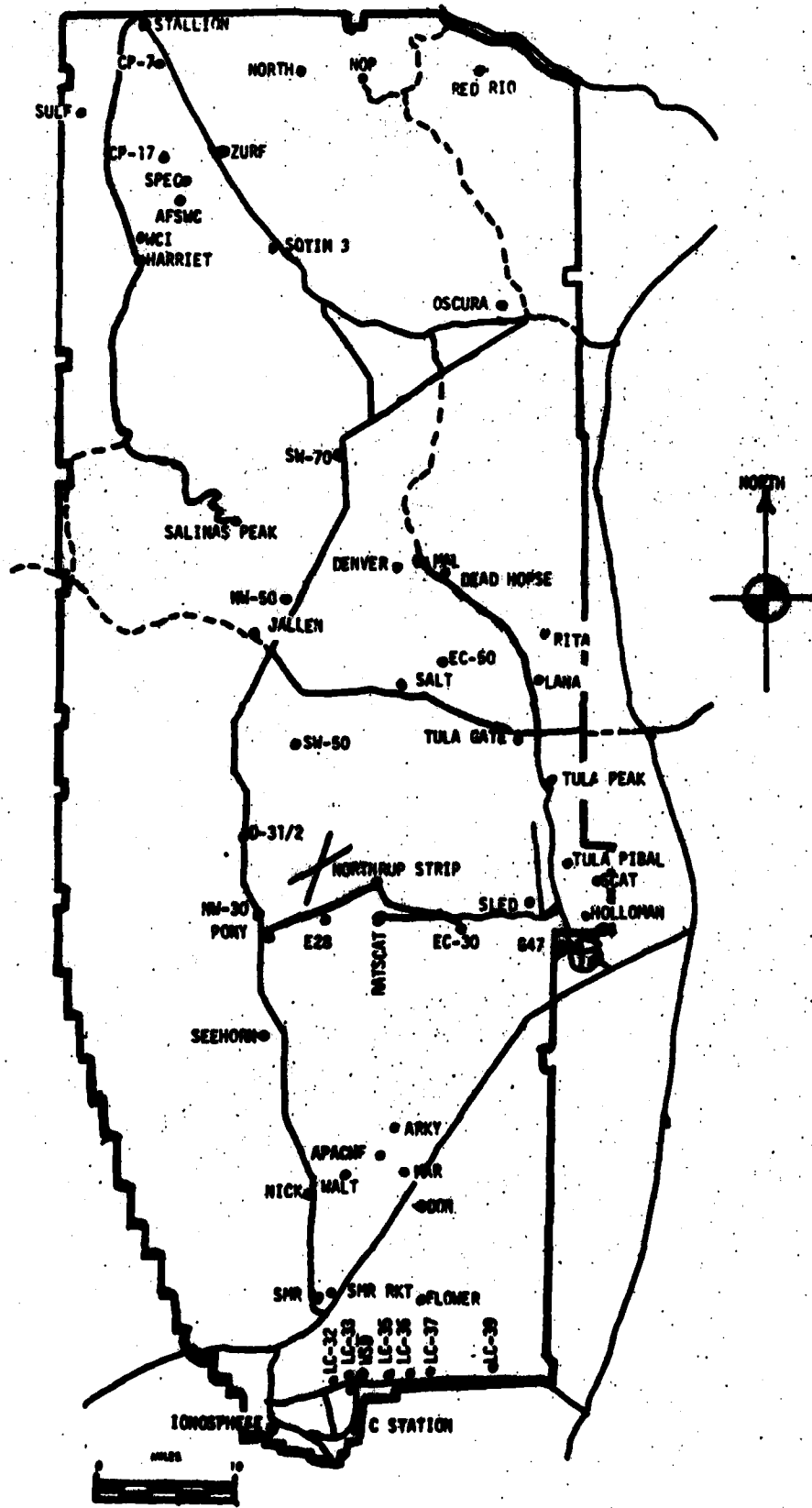
WSD	2760 Meters
Jallen	2700 Meters

(2) Air Structure data (rawinsonde) were collected at the following Met sites.

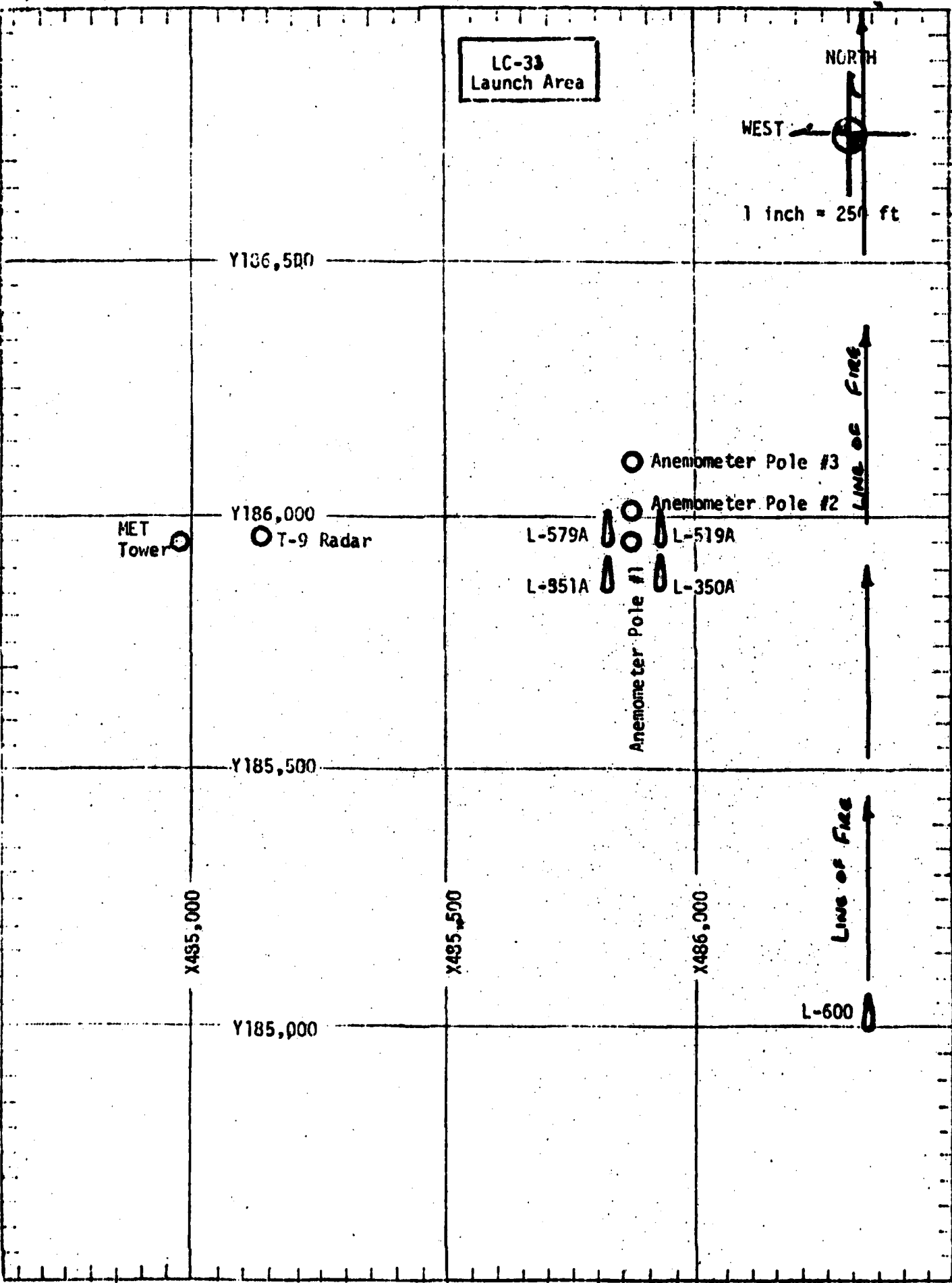
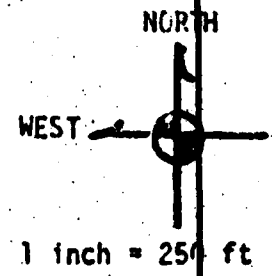
SITE AND TIME

Jallen	0630 MDT
Holloman	0800 MDT
LC-37	0900 MDT
WSD	0925 MDT
Jallen	1015 MDT

WSMR METEOROLOGICAL SITES



LC-33
Launch Area



PROJECT SURFACE OBSERVATION

TABLE 1 STATION LC 33 E & A

DATE 02 Sep 82 X= 484,982.64 Y= 185,957.73 H= 3995.00

TIME 0923 DAY 02 MONTH 09 YEAR 82

TIME H D T	PRESSURE mb	TEMPERATURE of °C	DEW POINT of °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	WIND			VISIBIL- ITY
						DIRECTION degs	SPEED kts	CHARACTER kts	
0923	883.2	28.0	10.2	3.3	1014	017	08		50

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
	1	CU	6,500				H ALQDS

PSYCHROMETRIC COMPUTATION

TIME:	0923
DRY BULB TEMP.	28.0
WET BULB TEMP.	16.6
WET BULB DEPR.	11.4
DEW POINT	10.2
RELATIVE HUMID.	33

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T ₃₀	015	07	T ₃₀	010	04	T ₃₀	006	07
T ₂₀	015	06	T ₂₀	009	05	T ₂₀	015	10
T ₁₀	015	08	T ₁₀	006	04	T ₁₀	013	10
T _{0.0}	015	08	T _{0.0}	010	06	T _{0.0}	013	09
T ₊₁₀	015	07	T ₊₁₀	015	06	T ₊₁₀	011	10

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T ₃₀	352	06	T ₃₀	009	08
T ₂₀	005	07	T ₂₀	010	10
T ₁₀	018	07	T ₁₀	011	08
T _{0.0}	017	08	T _{0.0}	014	08
T ₊₁₀	016	08	T ₊₁₀	014	09

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T ₃₀	005	09	T ₃₀	015	08
T ₂₀	006	09	T ₂₀	014	09
T ₁₀	005	08	T ₁₀	005	09
T _{0.0}	006	08	T _{0.0}	007	09
T ₊₁₀	006	08	T ₊₁₀	010	09

PROJECT SURFACE OBSERVATION

TABLE 4		STATION Jallan									
DATE 02 SEP 1982		X= 451,560.00 Y= 465,177.00 N= 4051.00									
TIME M D Y	BREASURE mb	TEMPERATURE of °C	DEW POINT of °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIRECTION degs	WIND SPEED kts	CHARACTER kts	VISIBIL- ITY		
0900	880.7	27.5	12.3	39	1012	360	04		40		
0923	881.7	28.7	11.5	35	1009	355	04		40		
0953	880.8	31.0	13.1	36	1001		CALM		40		

OBSTRUCTIONS TO VISIBILITY	CLOUDS												REMARKS
	1st LAYER			2nd LAYER			3rd LAYER						
	AMT	TYPE	HGT	AMT	TYPE	HGT	AMT	TYPE	HGT				
	2	AC	18,000										
	1	CU	6,500	2	AC	18,000							
	1	CU	6,500	1	AC	18,000							

PSYCHROMETRIC COMPUTATION

TIME:	0900	0930	0953
DRY BULB TEMP.	27.5	28.7	31.0
WET BULB TEMP.	17.5	17.5	19.0
WET BULB DEPR.	10.0	11.2	12.0
DEW POINT	12.3	11.5	13.1
RELATIVE HUMID.	39	35	36

PILOT BALLOON MEASURED WIND DATA

TABLE 5

RELEASED FROM WSD

DATE 02 Sep 1982

TIME 0913 MDT

COORDINATES (WSTM) X= 488,852.29 Y= 184,982.45 H= 3993.75

HEIGHTS ARE METERS AGL XX OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	360	10
60	001	08
120	002	06
180	004	06
240	045	03
300	040	06
360	045	05
420	019	03
480	085	02
540	101	01
600	051	03
660	066	04
720	070	04
780	086	05
840	092	04
900	138	04
960	168	01
1020	179	02
1080	207	03
1140	161	01
1200	121	04
1260	097	04
1320	095	05
1380	090	06
1440	095	06
1500	085	06
1560	086	06
1620	075	06
1680	076	07
1740	072	09

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 64.

RELEASED FROM WSD DATE 02 Sep 1982 TIME 0923 MDT

COORDINATES (WSTM) X= 488,852.29 Y= 184,982.45 H= 3993.75

HEIGHTS ARE METERS AGL X OR FEET AGL .

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	360	10
60	003	08
120	006	08
180	012	09
240	021	08
300	056	03
360	035	05
420	038	04
480	092	03
540	049	03
600	074	02
660	066	04
720	066	04
780	091	06
840	110	06
900	098	04
960	081	03
1020	124	01
1080	189	01
1140	164	01
1200	129	02
1260	103	03
1320	097	05
1380	093	05
1440	087	06
1500	090	06
1560	087	06
1620	076	07
1680	080	07
1740	078	08

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 7

RELEASED FROM JALLEN

DATE 02 Sep 1982

TIME 0830 MDT

COORDINATES (WSTM) X= 451,560.00 Y= 465,177.00 H= 4051.00

HEIGHTS ARE METERS AGL XX OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	360	03
60	001	04
120	001	04
180	002	05
240	002	05
300	002	06
360	005	06
420	015	05
480	031	04
540	051	04
600	072	04
660	090	04
720	097	05
780	104	05
840	109	05
900	115	05
960	120	05
1020	127	05
1080	135	05
1140	144	04
1200	155	04
1260	165	04
1320	169	04
1380	172	05
1440	174	05
1500	176	06
1560	178	06
1620	177	05
1680	174	04
1740	170	03

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 84.

RELEASED FROM JALLEN DATE 02 Sep 1982 TIME 0925 MDT

COORDINATES (WSTM) X= 451,560.00 Y= 465,177.00 H= 4051.00

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	355	04
60	356	04
120	357	04
180	358	04
240	359	04
300	360	04
360	003	04
420	013	03
480	030	02
540	057	02
600	087	02
660	107	03
720	114	03
780	118	04
840	121	04
900	124	05
960	126	05
1020	131	05
1080	138	05
1140	146	04
1200	154	04
1260	162	04
1320	163	04
1380	162	05
1440	161	05
1500	160	05
1560	159	05
1620	152	04
1680	144	04
1740	134	04

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 9.

RELEASED FROM JALLEN

DATE 02 Sep 1982

TIME 0955 MDT

COORDINATES (WSTM) X= 451,560.00 Y= 465,177.00 H= 4051.00

HEIGHTS ARE METERS AGL ^{XX} OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	000	00
60	050	01
120	050	01
180	050	01
240	050	02
300	050	02
360	054	02
420	071	02
480	089	02
540	104	02
600	116	03
660	125	03
720	127	04
780	119	04
840	117	04
900	115	05
960	114	05
1020	117	05
1080	122	05
1140	128	04
1200	136	04
1260	145	04
1320	152	03
1380	160	04
1440	168	03
1500	176	03
1560	184	03
1620	173	03
1680	157	03
1740	141	03

[illegible][illegible]

AIMING COMPUTER MET MESSAGE

JALLEN 0630MDT

METCM1332065

021250124880

00640005 29350880

01046009 29810870

02043005 29940846

03155002 29780808

04377005 29470763

05288002 29060720

06069005 28640678

07111012 28190639

08110013 27750601

09121011 27360565

10130009 26970531

11119007 26620498

12069009 26180452

13016020 25500396

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

SIGNIFICANT LEVEL DATA
2450030127
JALLEN
TABLE 11

STATION ALTITUDE 4051.20 FEET MSL
2 SEP. 82 0630 HRS MDT
ASCENSION NO. 127

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
280.3	17.0	57.0
876.1	21.7	45.0
968.9	25.2	36.0
550.0	25.0	34.0
208.1	23.4	34.0
759.5	19.9	42.0
750.0	14.4	44.0
658.9	10.1	54.0
632.9	7.1	55.0
599.5	3.2	67.0
575.3	-1.0	62.0
559.3	-1.5	72.0
551.7	-3.6	57.0
536.5	-4.4	82.0
528.7	-7.4	87.0
500.0	-8.6	91.0
451.9	-10.2	85.0
477.9	-16.0	60.0
461.5	-17.7	62.0
456.7	-25.3	30.0
449.9	-26.1	27.0
400.0	-28.4	38.0
355.5	-36.0	35.0
343.7	-36.0	39.0
300.0	-44.6	35.0
269.3	-49.3	35.0
250.0		
200.0		
185.1		
177.1		
165.5		
157.9		
150.0		
136.0		
121.8		
115.0		
104.8		
100.0		
55.6		
70.0		

STATION ALTITUDE 4051.00: FREE HST
2 SEP 82 0630: IRS 101

...:GEODETTIC COORDINATES
...:33.16712 LAT DEG
...:106.49511-LON DEG

TABLE 12

[illegible]

STATION ALTITUDE 4051.00 FEET MSL
2 SEP. 52
ASCENSION NO. 127

UPPER AIR DATA
2450030127
JALLEN
TABLE 12 Cont'd

GEODETIC COORDINATES
33.14712 LAT DEG
106.49511 LON DEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	DEWPOINT DEGREES CELSIUS	REL. HUMIDITY PERCENT	DENSITY G/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	418.9	-14.9	-27.5	33.7	564.8	626.2	8.1	17.9	1.000129
24500.0	410.6	-16.1	-27.8	35.6	556.1	624.4	8.6	19.9	1.000127
25000.0	402.5	-17.2	-28.3	37.4	547.6	623.4	10.1	19.6	1.000125
25500.0	394.3	-18.5	-29.3	37.6	539.2	621.8	12.3	18.5	1.000123
26000.0	386.3	-19.8	-30.7	37.1	530.9	620.2	10.9	19.0	1.000121
26500.0	378.4	-21.1	-32.0	36.6	522.8	618.4	8.9	19.5	1.000119
27000.0	370.7	-22.4	-33.3	36.1	514.8	617.0	4.7	19.3	1.000117
27500.0	363.1	-23.7	-34.6	35.5	506.9	615.4	360.0	18.9	1.000115
28000.0	355.7	-25.0	-35.9	35.0	499.2	613.8	354.1	17.6	1.000113
28500.0	348.4	-25.7	-35.9	37.4	490.3	612.9	351.5	16.2	1.000111
29000.0	341.1	-26.6	-36.4	38.8	481.9	611.8	350.3	14.7	1.000109
29500.0	333.9	-27.9	-37.7	38.1	474.1	610.2	346.7	14.0	1.000107
30000.0	326.9	-29.1	-39.0	37.5	466.5	608.7	343.3	13.5	1.000105
30500.0	320.0	-30.4	-40.3	36.9	459.0	607.1	344.5	13.5	1.000103
31000.0	313.2	-31.6	-41.6	36.3	451.6	605.5	346.1	13.7	1.000102
31500.0	306.6	-32.8	-42.8	35.6	444.4	604.0	349.1	14.1	1.000100
32000.0	300.1	-34.1	-44.1	35.0	437.3	602.4	350.3	14.7	1.000098
32500.0	293.6	-35.2	-45.2	33.0	429.9	600.9	348.8	15.6	1.000096
33000.0	287.2	-36.4	-46.2	33.0	422.6	599.5	346.7	16.3	1.000095
33500.0	281.0	-37.6	-47.3	33.0	415.5	598.0	344.4	17.2	1.000093
34000.0	274.9	-38.9	-48.3	33.0	408.3	596.5	340.0	18.2	1.000091
34500.0	268.9	-39.9	-49.5	34.3**	401.6	595.0	335.4	19.3	1.000090
35000.0	263.0	-41.2	-53.8	23.8**	394.9	593.3	333.9	20.9	1.000088
35500.0	257.1	-42.5	-59.6	13.2**	388.4	591.6	333.0	22.7	1.000087
36000.0	251.4	-43.9	-72.1	2.7**	382.0	589.9	335.0	23.6	1.000085
36500.0	245.7	-45.1			375.4	588.3	337.0	24.1	1.000084
37000.0	240.1	-46.4			368.8	586.6	339.7	24.6	1.000082
37500.0	234.5	-47.7			362.4	585.0	342.2	25.3	1.000081
38000.0	229.2	-48.9			356.0	583.4	344.1	26.7	1.000079
38500.0	223.9	-50.2			349.8	581.7	345.2	27.8	1.000078
39000.0	218.7	-51.4			343.7	580.1	343.5	27.4	1.000077
39500.0	213.7	-52.7			337.7	578.4	341.1	26.9	1.000075
40000.0	208.8	-54.0			331.9	576.8	335.0	25.5	1.000074
40500.0	204.0	-55.2			326.1	575.1	328.5	24.4	1.000073
41000.0	199.3	-56.4			320.4	573.5	323.6	24.1	1.000071
41500.0	194.6	-57.5			314.3	572.1	318.6	23.9	1.000070
42000.0	189.9	-58.5			308.2	570.8	321.0	24.1	1.000069
42500.0	185.4	-59.5			302.4	569.4	323.5	24.3	1.000067
43000.0	181.0	-60.1			295.8	568.7	325.0	25.3	1.000066
43500.0	176.6	-60.6			289.5	568.0	326.2	26.4	1.000064

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

STATION ALTITUDE 4050 MSL
2 SEP. 82
ASCENSION NO. 127

UPPER AIR DATA
2450030127
JALLEN
TABLE 12 Cont'd

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TM)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	172.3	-61.4		283.5	566.9	325.1	26.8	1.000063
44500.0	168.2	-62.2		277.7	565.9	323.9	27.3	1.000062
45000.0	164.1	-62.3		271.1	565.7	324.5	29.4	1.000060
45500.0	160.1	-61.2		263.2	567.2	325.4	31.9	1.000059
46000.0	156.3	-60.9		256.5	567.6	327.1	33.2	1.000057
46500.0	152.5	-61.9		251.4	566.3	329.1	34.0	1.000056
47000.0	148.8	-62.8		246.4	565.1	330.6	32.7	1.000055
47500.0	145.2	-63.5		241.2	564.0	331.8	28.9	1.000054
48000.0	141.6	-64.3		236.2	563.0	331.3	25.8	1.000053
48500.0	138.1	-65.1		231.3	561.9	324.8	24.7	1.000052
49000.0	134.8	-65.7		226.3	561.2	318.2	23.8	1.000050
49500.0	131.4	-65.8		220.9	560.9	315.5	22.2	1.000049
50000.0	128.2	-66.0		215.6	560.7	312.2	20.7	1.000048
50500.0	125.0	-66.2		210.5	560.4	319.5	18.9	1.000047
51000.0	121.9	-66.4		205.5	560.2	328.1	17.5	1.000046
51500.0	118.9	-67.0		201.0	559.3	331.8	18.6	1.000045
52000.0	116.0	-67.7		196.6	558.4	334.9	19.9	1.000044
52500.0	113.1	-68.2		192.2	557.7	337.5	20.3	1.000043
53000.0	110.2	-68.8		187.9	557.0	340.0	20.1	1.000042
53500.0	107.5	-69.3		183.7	556.3	344.1	19.9	1.000041
54000.0	104.8	-69.8		179.5	555.5	350.9	19.7	1.000040
54500.0	102.2	-69.7		174.9	553.7	357.6	19.8	1.000039
55000.0	99.6	-69.6		170.4	555.9	3.7	19.8	1.000038
55500.0	97.1	-69.2		165.9	556.3	7.8	19.9	1.000037
56000.0	94.7	-68.9		161.5	556.7	10.1	17.6	1.000036
56500.0	92.3	-68.6		157.3	557.1	13.0	15.0	1.000035
57000.0	90.0	-68.3		153.1	557.6	14.7	12.7	1.000034
57500.0	87.8	-68.0		149.0	558.0	16.4	8.7	1.000033
58000.0	85.6	-67.7		145.1	558.4	16.1	6.5	1.000032
58500.0	83.5	-67.2		141.2	559.1	12.0	5.4	1.000031
59000.0	81.4	-66.7		137.6	559.8	15.9	4.6	1.000030
59500.0	79.4	-66.1		133.6	560.5	47.4	5.4	1.000029
60000.0	77.5	-65.6		130.0	561.2	66.4	7.3	1.000028
60500.0	75.6	-65.1		124.5	561.9			1.000027
61000.0	73.7	-64.6		123.1	562.6			1.000027
61500.0	71.9	-64.1		119.8	563.3			1.000027
62000.0	70.1	-63.5		114.5	564.0			1.000026

STATION ALTITUDE 4051.00 FEET MSL
2 SEP. 82 0630 HRS MDT
ASCENSION NO. 127

MANDATORY LEVELS
2450030127
JALLEN
TABLE 13

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
350.0	5054.	25.0	8.1	3.0	19.8	3.5
300.0	6793.	22.8	6.7	35.	129.9	1.1
750.0	8626.	19.1	6.0	42.	205.8	4.5
700.0	10556.	16.4	2.3	46.	33.6	2.3
650.0	12597.	9.1	.4	54.	62.9	10.2
600.0	14749.	3.3	-2.3	67.	61.6	13.2
550.0	17045.	-1.7	-8.3	63.	70.8	10.5
500.0	19509.	-7.4	-8.6	91.	68.1	7.0
450.0	22179.	-10.8	-26.1	27.	41.5	9.2
400.0	25111.	-17.6	-28.6	38.	10.7	19.3
350.0	28339.	-25.6	-35.9	37.	351.8	16.5
300.0	31947.	-34.1	-44.2	35.	350.3	14.7
250.0	36049.	-44.2			335.4	23.5
200.0	40829.	-56.3			324.5	24.1
175.0	43579.	-60.9			126.0	26.6
150.0	46712.	-62.5			330.3	34.1
125.0	50361.	-66.2			319.2	19.0
100.0	54753.	-69.6			1.6	19.8
80.0	59149.	-66.3			37.2	4.9
70.0	61822.	-63.5				

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

STATION ALTITUDE 4126.59 FEET MSL
2 SEP. 62
ASCENSION NO. 221

SIGNIFICANT LEVEL DATA
2450010221
HULLMAN
TABLE 14

GEODETIC COORDINATES
32.08865 LAT DEG
106.09965 LO. DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT
877.1	21.0	58.0
865.0	25.3	51.0
850.0	25.8	49.0
773.7	21.3	51.0
700.0	14.7	56.0
662.3	10.6	59.0
597.3	2.0	61.0
582.1	1.0	70.0
566.0	-0.9	69.0
550.1	-1.7	96.0
530.7	-4.5	64.0
520.3	-4.0	70.0
505.6	-6.3	65.0
500.0	-6.7	34.0
487.5	-8.4	34.0
453.1	-10.7	33.0
439.9	-11.7	34.0
400.8	-17.0	40.0
372.3	-21.9	49.0
364.6	-23.2	36.0
340.3	-25.0	41.0
332.7	-27.5	38.0
300.0	-33.7	38.0
266.7	-39.8	37.0
250.0	-44.3	
200.0	-55.8	
193.0	-57.2	
188.8	-57.1	
160.8	-63.0	
151.5	-61.4	
150.0	-62.5	
140.6	-64.6	
126.8	-65.0	
113.6	-69.4	
104.0	-69.8	
100.0	-69.6	
96.1	-67.4	
74.6	-44.2	
75.4	-62.1	
70.0	-63.2	

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.89965 LONG DEG

SIGNIFICANT LEVEL DATA
 2450010821

TABLE 14 Cont'd

STATION ALTITUDE 126.59 FEET MSL
 2 SEP. 82 0800 HRS MDT
 ASLHSLW NO. 221

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
63.4 64139.0	-62.8		
50.0 69069.3	-58.3		
46.8 70468.7	-54.8		
44.1 71734.2	-51.5		
34.8 77316.7	-51.5		
30.0 80022.9	-48.4		
24.8 84160.2	-49.3		
20.0 88474.4	-44.4		
17.0 91460.5	-45.1		
13.0 98444.0	-43.1		
11.0 100613.2	-41.7		

STATION ALTITUDE 4124-5.9 FEET MSL
 2 SEP. 42
 ALTITUDE NO. 421

UPPER AIR DATA
 2450010274
 HOLLAND
 TABLE 15

GEOMETRIC COORDINATES
 32-44445 LAT DEC
 100-44445 LONG DEC

GEOMETRIC ALTITUDE MFL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	WIND SPEED KNOTS	WIND DIRECTION DEGREES	INDEX OF REFRACTION
4124.0	874.1	21.0	58.0	1032.3	10.0	1.9	1.000293
4144.0	865.9	20.0	51.4	1004.3	10.0	1.9	1.000294
4164.0	858.9	19.3	48.1	984.5	10.0	1.7	1.000299
4184.0	852.3	18.8	49.3	974.1	10.0	2.7	1.000253
4204.0	846.0	18.2	49.7	965.2	10.0	2.6	1.000270
4224.0	840.7	17.8	50.1	958.5	10.0	2.5	1.000272
4244.0	835.7	17.5	50.5	953.1	10.0	2.3	1.000267
4264.0	830.8	17.2	50.8	948.7	10.0	2.2	1.000262
4284.0	826.0	16.8	51.1	944.9	10.0	2.2	1.000256
4304.0	821.3	16.5	51.5	941.3	10.0	2.1	1.000251
4324.0	816.8	16.2	51.9	938.0	10.0	2.1	1.000246
4344.0	812.3	15.8	52.2	934.8	10.0	1.7	1.000240
4364.0	808.0	15.5	52.5	931.7	10.0	1.4	1.000241
4384.0	803.7	15.2	52.8	928.7	10.0	2.7	1.000236
4404.0	800.0	14.8	53.1	925.8	10.0	2.7	1.000231
4424.0	796.5	14.5	53.4	923.0	10.0	6.1	1.000226
4444.0	793.0	14.2	53.7	920.2	10.0	10.3	1.000221
4464.0	789.5	13.8	54.0	917.4	10.0	11.0	1.000217
4484.0	786.0	13.5	54.3	914.7	10.0	12.4	1.000213
4504.0	782.5	13.2	54.6	912.0	10.0	12.7	1.000210
4524.0	779.0	12.8	54.9	909.3	10.0	12.9	1.000207
4544.0	775.5	12.5	55.2	906.6	10.0	13.2	1.000203
4564.0	772.0	12.2	55.5	904.0	10.0	14.1	1.000200
4584.0	768.5	11.8	55.8	901.3	10.0	14.7	1.000195
4604.0	765.0	11.5	56.1	898.7	10.0	14.9	1.000190
4624.0	761.5	11.2	56.4	896.0	10.0	14.7	1.000187
4644.0	758.0	10.8	56.7	893.4	10.0	14.6	1.000182
4664.0	754.5	10.5	57.0	890.7	10.0	13.7	1.000177
4684.0	751.0	10.2	57.3	888.1	10.0	12.6	1.000172
4704.0	747.5	9.8	57.6	885.4	10.0	10.5	1.000166
4724.0	744.0	9.5	57.9	882.8	10.0	10.1	1.000160
4744.0	740.5	9.2	58.2	880.1	10.0	10.3	1.000154
4764.0	737.0	8.8	58.5	877.5	10.0	10.9	1.000153
4784.0	733.5	8.5	58.8	874.8	10.0	11.9	1.000150
4804.0	730.0	8.2	59.1	872.2	10.0	11.1	1.000146
4824.0	726.5	7.8	59.4	869.5	10.0	11.0	1.000143
4844.0	723.0	7.5	59.7	866.9	10.0	11.7	1.000139
4864.0	719.5	7.2	60.0	864.2	10.0	12.5	1.000137
4884.0	716.0	6.8	60.3	861.6	10.0	13.4	1.000134
4904.0	712.5	6.5	60.6	858.9	10.0	14.4	1.000132
4924.0	709.0	6.2	60.9	856.3	10.0		
4944.0	705.5	5.8	61.2	853.6	10.0		
4964.0	702.0	5.5	61.5	851.0	10.0		
4984.0	698.5	5.2	61.8	848.3	10.0		
5004.0	695.0	4.8	62.1	845.7	10.0		
5024.0	691.5	4.5	62.4	843.0	10.0		
5044.0	688.0	4.2	62.7	840.4	10.0		
5064.0	684.5	3.8	63.0	837.7	10.0		
5084.0	681.0	3.5	63.3	835.1	10.0		
5104.0	677.5	3.2	63.6	832.4	10.0		
5124.0	674.0	2.8	63.9	829.8	10.0		
5144.0	670.5	2.5	64.2	827.1	10.0		
5164.0	667.0	2.2	64.5	824.5	10.0		
5184.0	663.5	1.8	64.8	821.8	10.0		
5204.0	660.0	1.5	65.1	819.2	10.0		
5224.0	656.5	1.2	65.4	816.5	10.0		
5244.0	653.0	0.8	65.7	813.9	10.0		
5264.0	649.5	0.5	66.0	811.2	10.0		
5284.0	646.0	0.2	66.3	808.6	10.0		
5304.0	642.5	0.0	66.6	805.9	10.0		
5324.0	639.0	-0.4	66.9	803.3	10.0		
5344.0	635.5	-0.8	67.2	800.6	10.0		
5364.0	632.0	-1.2	67.5	798.0	10.0		
5384.0	628.5	-1.6	67.8	795.3	10.0		
5404.0	625.0	-2.0	68.1	792.7	10.0		
5424.0	621.5	-2.4	68.4	790.0	10.0		
5444.0	618.0	-2.8	68.7	787.4	10.0		
5464.0	614.5	-3.2	69.0	784.7	10.0		
5484.0	611.0	-3.6	69.3	782.1	10.0		
5504.0	607.5	-4.0	69.6	779.4	10.0		
5524.0	604.0	-4.4	69.9	776.8	10.0		
5544.0	600.5	-4.8	70.2	774.1	10.0		
5564.0	597.0	-5.2	70.5	771.5	10.0		
5584.0	593.5	-5.6	70.8	768.8	10.0		
5604.0	590.0	-6.0	71.1	766.2	10.0		
5624.0	586.5	-6.4	71.4	763.5	10.0		
5644.0	583.0	-6.8	71.7	760.9	10.0		
5664.0	579.5	-7.2	72.0	758.2	10.0		
5684.0	576.0	-7.6	72.3	755.6	10.0		
5704.0	572.5	-8.0	72.6	752.9	10.0		
5724.0	569.0	-8.4	72.9	750.3	10.0		
5744.0	565.5	-8.8	73.2	747.6	10.0		
5764.0	562.0	-9.2	73.5	745.0	10.0		
5784.0	558.5	-9.6	73.8	742.3	10.0		
5804.0	555.0	-10.0	74.1	739.7	10.0		
5824.0	551.5	-10.4	74.4	737.0	10.0		
5844.0	548.0	-10.8	74.7	734.4	10.0		
5864.0	544.5	-11.2	75.0	731.7	10.0		
5884.0	541.0	-11.6	75.3	729.1	10.0		
5904.0	537.5	-12.0	75.6	726.4	10.0		
5924.0	534.0	-12.4	75.9	723.8	10.0		
5944.0	530.5	-12.8	76.2	721.1	10.0		
5964.0	527.0	-13.2	76.5	718.5	10.0		
5984.0	523.5	-13.6	76.8	715.8	10.0		
6004.0	520.0	-14.0	77.1	713.2	10.0		
6024.0	516.5	-14.4	77.4	710.5	10.0		
6044.0	513.0	-14.8	77.7	707.9	10.0		
6064.0	509.5	-15.2	78.0	705.2	10.0		
6084.0	506.0	-15.6	78.3	702.6	10.0		
6104.0	502.5	-16.0	78.6	699.9	10.0		
6124.0	499.0	-16.4	78.9	697.3	10.0		
6144.0	495.5	-16.8	79.2	694.6	10.0		
6164.0	492.0	-17.2	79.5	692.0	10.0		
6184.0	488.5	-17.6	79.8	689.3	10.0		
6204.0	485.0	-18.0	80.1	686.7	10.0		
6224.0	481.5	-18.4	80.4	684.0	10.0		
6244.0	478.0	-18.8	80.7	681.4	10.0		
6264.0	474.5	-19.2	81.0	678.7	10.0		
6284.0	471.0	-19.6	81.3	676.1	10.0		
6304.0	467.5	-20.0	81.6	673.4	10.0		
6324.0	464.0	-20.4	81.9	670.8	10.0		
6344.0	460.5	-20.8	82.2	668.1	10.0		
6364.0	457.0	-21.2	82.5	665.5	10.0		
6384.0	453.5	-21.6	82.8	662.8	10.0		
6404.0	450.0	-22.0	83.1	660.2	10.0		
6424.0	446.5	-22.4	83.4	657.5	10.0		
6444.0	443.0	-22.8	83.7	654.9	10.0		
6464.0	439.5	-23.2	84.0	652.2	10.0		
6484.0	436.0	-23.6	84.3	649.6	10.0		
6504.0	432.5	-24.0	84.6	646.9	10.0		
6524.0	429.0	-24.4	84.9	644.3	10.0		
6544.0	425.5	-24.8	85.2	641.6	10.0		
6564.0	422.0	-25.2	85.5	639.0	10.0		
6584.0	418.5	-25.6	85.8	636.3	10.0		
6604.0	415.0	-26.0	86.1	633.7	10.0		
6624.0	411.5	-26.4	86.4	631.0	10.0		
6644.0	408.0	-26.8	86.7	628.4	10.0		
6664.0	404.5	-27.2	87.0	625.7	10.0		
6684.0	401.0	-27.6	87.3	623.1	10.0		
6704.0	397.5	-28.0	87.6	620.4	10.0		
6724.0	394.0	-28.4	87.9	617.8	10.0		
6744.0	390.5	-28.8	88.2	615.1	10.0		
6764.0	387.0	-29.2	88.5	612.5	10.0		
6784.0	383.5	-29.6	88.8	609.8	10.0		
6804.0	380.0	-30.0	89.1	607.2	10.0		
6824.0	376.5	-30.4	89.4	604.5	10.0		
6844.0	373.0	-30.8	89.7	601.9	10.0		
6864.0	369.5	-31.2	90.0	599.2	10.0		
6884.0	366.0	-31.6	90.3	596.6	10.0		
6904.0	362.5	-32.0	90.6	593.9	10.0		
6924.0	359.0	-32.4	90.9	591.3	10.0		
6944.0	355.5	-32.8	91.2	588.6	10.0		
6964.0	352.0	-33.2	91.5	586.0	10.0		
6984.0	348.5	-33.6	91.8	583.3	10.0		
7004.0	345.0	-34.0	92.1	580.7	10.0		
7024.0	341.5	-34.4	92.4	578.0	10.0		
7044.0	338.0	-34.8	92.7	575.4	10.0		
7064.0	334.5	-35.2	93.0	572.7	10.0		
7084.0	331.0	-35.6	93.3	570.1	10.0		
7104.0	327.5	-36.0	93.6	567.4	10.0		
7124.0	324.0	-36.4	93.9	564.8	10.0		
7144.0	320.5	-36.8	94.2	562.1	10.0		
7164.0	317.0	-37.2	94.5	559.5	10.0		
7184.0	313.5	-37.6	94.8	556.8	10.0		
7204.0	310.0	-38.0	95.1	554.2	10.0		
7224.0	306.5	-38.4	95.4	551.5	10.0		
7244.0	303.0	-38.8	95.7	548.9	10.0		
7264.0	299.5	-39.2	96.0	546.2	10.0		
7284.0	296.0	-39.6	96.3	543.6	10.0		
7304.0	292.5	-40.0	96.6	540.9	10.0		
7324.0	289.0	-40.4	96.9	538.3	10.0		
7344.0	285.5	-40.8	97.2	535.6	10.0		

STATION ALTITUDE "1300' HRS ADT SL"
2 SEP. 82
ASCENSION NO. 221

UPPER AIR DATA
2450010221
1001010101

GEODETL COORDINATES
32.00865 LAT E26
106.00965 LONG U26

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE IN DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	410.9	-14.7	37.1	564.3	626.5	45.2	15.2	1.000130
24500.0	410.6	-16.0	38.4	555.0	624.9	43.1	15.7	1.000126
25000.0	402.8	-17.2	39.6	547.5	623.4	40.1	16.2	1.000120
25500.0	394.3	-18.5	41.8	539.0	621.9	40.0	16.7	1.000124
26000.0	386.3	-19.7	44.4	530.7	621.4	44.2	17.6	1.000122
26500.0	378.5	-20.9	46.9	522.5	620.9	42.1	18.6	1.000120
27000.0	370.8	-22.1	46.9	514.4	617.4	40.5	18.4	1.000117
27500.0	363.2	-23.4	38.3	506.5	615.0	40.0	18.2	1.000115
28000.0	355.7	-24.6	39.7	498.4	614.3	37.4	16.9	1.000113
28500.0	348.4	-25.7	40.8	490.3	612.9	34.9	16.0	1.000111
29000.0	341.1	-26.5	39.5	481.7	611.9	34.0	15.9	1.000109
29500.0	334.0	-27.3	38.2	473.3	610.9	34.0	15.5	1.000107
30000.0	327.0	-28.5	38.0	465.0	609.4	34.1	14.8	1.000105
30500.0	320.1	-29.8	38.0	456.1	607.8	34.0	14.1	1.000103
31000.0	313.3	-31.1	38.0	450.8	606.2	33.9	13.3	1.000102
31500.0	306.7	-32.4	38.0	443.7	604.6	33.9	13.7	1.000100
32000.0	300.2	-33.7	38.0	436.6	602.9	33.9	14.7	1.000098
32500.0	293.7	-34.8	37.8	429.2	601.5	33.9	15.8	1.000096
33000.0	287.3	-35.9	37.6	421.9	600.1	33.9	16.8	1.000095
33500.0	281.1	-37.1	37.4	414.7	598.6	33.9	18.7	1.000093
34000.0	275.0	-38.2	37.3	407.7	597.2	33.9	20.7	1.000091
34500.0	269.0	-39.3	37.1	400.8	595.7	33.9	22.3	1.000090
35000.0	263.1	-40.7	29.3**	394.4	593.9	33.9	24.0	1.000088
35500.0	257.3	-42.3	16.4**	388.2	591.9	33.9	23.6	1.000087
36000.0	251.6	-43.9		382.2	589.9	33.7	23.2	1.000085
36500.0	245.9	-45.2		375.7	588.2	33.7	23.4	1.000084
37000.0	240.2	-46.4		369.0	586.7	33.6	23.8	1.000082
37500.0	234.7	-47.6		362.4	585.1	33.9	24.8	1.000081
38000.0	229.3	-48.8		356.0	583.6	34.0	25.2	1.000079
38500.0	224.1	-49.9		349.7	582.0	33.9	24.5	1.000078
39000.0	218.9	-51.1		343.5	580.5	33.9	23.8	1.000077
39500.0	213.9	-52.3		337.4	578.9	33.7	23.1	1.000075
40000.0	209.0	-53.5		331.5	577.3	33.9	22.8	1.000074
40500.0	204.2	-54.7		325.7	575.8	33.9	23.2	1.000073
41000.0	199.5	-55.9		319.9	574.2	33.9	23.4	1.000071
41500.0	194.8	-57.1		313.7	573.0	33.9	21.0	1.000070
42000.0	190.1	-58.3		308.0	572.0	33.9	18.6	1.000068
42500.0	185.4	-59.5		302.1	571.8	33.9	16.7	1.000067
43000.0	181.1	-60.6		296.2	570.6	33.9	14.8	1.000066
43500.0	176.8	-61.5		290.3	569.4	33.7	16.9	1.000064

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

STATION ALTITUDE 12659 FEET MSL
2 SEP. 82
ASCENSION NO. 21

UPPER AIR DATA
2430010221
HOLLAMAN

GEODETIC COORDINATES
32.00865 LAT N
106.00965 LONG W

TABLE 15 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE HILLIARS	TEMPERATURE /IR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/CM ³ VEP	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	172.6	-60.4		282.0	508.2	337.2	19.0	1.000063
44500.0	168.4	-61.3		276.9	507.0	336.4	20.9	1.000062
45000.0	164.4	-62.2		271.4	505.8	335.0	22.6	1.000060
45500.0	160.0	-62.9		265.0	504.9	335.0	23.1	1.000059
46000.0	155.5	-62.1		258.3	503.0	335.4	23.5	1.000058
46500.0	152.7	-61.6		251.0	500.0	335.9	23.7	1.000056
47000.0	149.0	-62.7		246.7	503.1	332.4	24.0	1.000055
47500.0	145.4	-63.5		241.6	504.1	331.9	24.8	1.000054
48000.0	141.8	-64.3		236.6	503.0	331.4	25.5	1.000053
48500.0	138.4	-64.7		231.2	502.5	329.7	26.4	1.000051
49000.0	135.0	-64.8		225.0	502.4	328.1	27.3	1.000050
49500.0	131.7	-64.9		220.2	502.3	331.9	27.1	1.000049
50000.0	128.4	-65.0		214.9	502.1	330.6	26.9	1.000048
50500.0	125.3	-65.5		210.1	501.4	344.0	25.7	1.000047
51000.0	122.2	-66.5		205.9	500.0	353.1	24.3	1.000046
51500.0	119.1	-67.5		201.0	508.7	358.4	23.1	1.000045
52000.0	116.2	-68.5		197.0	507.3	359.0	21.7	1.000044
52500.0	113.3	-69.4		193.7	506.1	0.0	20.7	1.000043
53000.0	110.4	-69.5		188.9	505.9	1.0	20.6	1.000042
53500.0	107.7	-69.6		184.3	505.6	2.4	20.7	1.000041
54000.0	105.0	-69.8		179.8	505.6	6.9	21.5	1.000040
54500.0	102.3	-69.7		175.2	505.7	11.7	21.7	1.000039
55000.0	99.8	-69.5		170.0	506.0	20.7	18.7	1.000038
55500.0	97.3	-68.1		165.2	507.9	32.0	16.2	1.000037
56000.0	94.9	-67.2		160.4	509.1	41.0	12.3	1.000036
56500.0	92.5	-66.8		155.2	509.6	56.3	8.9	1.000035
57000.0	90.2	-66.4		152.1	500.2	56.0	6.6	1.000034
57500.0	88.0	-66.0		148.0	500.7	48.3	4.4	1.000033
58000.0	85.9	-65.6		144.1	501.2	34.1	3.5	1.000032
58500.0	83.7	-65.2		140.3	501.8	19.4	3.4	1.000031
59000.0	81.7	-64.8		136.0	502.3	17.7	3.4	1.000030
59500.0	79.7	-64.4		133.0	502.9	37.0	3.5	1.000030
60000.0	77.7	-63.6		129.2	503.9	50.2	3.9	1.000029
60500.0	75.8	-62.4		125.3	505.0	93.0	4.9	1.000028
61000.0	74.0	-62.4		122.3	505.0	114.0	7.2	1.000027
61500.0	72.2	-62.7		119.5	505.1	117.5	7.7	1.000027
62000.0	70.4	-63.1		116.0	504.0	118.1	7.7	1.000026
62500.0	68.7	-63.1		114.0	504.6	111.2	7.7	1.000025
63000.0	67.1	-63.0		111.2	504.7	97.9	8.1	1.000025
63500.0	65.4	-62.9		108.4	504.9	88.9	9.1	1.000024

STATION ALTITUDE 4126.49 FEET MSL
2 SEP. 52
ASCENSION NO. 221

UPPER AIR DATA
2450010221
HOLLOWAY
TABLE 15 Cont'd

GEODETIC COORDINATES
32-088865 LAT DEG
106-099465 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/MS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
64000.0	63.8	-42.8		105.7	565.0	08.9	1.000024
64500.0	62.3	-42.2		102.9	565.9	08.8	1.000023
65000.0	60.8	-41.3		100.0	567.0	91.2	1.000022
65500.0	59.4	-40.5		97.3	568.2	94.0	1.000022
66000.0	58.0	-39.6		94.6	569.3	96.8	1.000021
66500.0	56.6	-38.7		91.9	570.5	99.4	1.000020
67000.0	55.2	-37.9		89.4	571.6	102.5	1.000020
67500.0	53.9	-37.0		86.9	572.8	104.6	1.000019
68000.0	52.6	-36.1		84.5	573.9	106.7	1.000019
68500.0	51.4	-35.3		82.2	575.0	111.6	1.000018
69000.0	50.2	-34.4		79.9	576.2	117.5	1.000018
69500.0	49.0	-34.5		76.0	576.1	118.6	1.000017
70000.0	47.8	-34.6		70.3	575.9	116.0	1.000017
70500.0	46.7	-34.7		74.5	575.8	110.3	1.000017
71000.0	45.6	-33.4		72.4	577.5	69.8	1.000016
71500.0	44.6	-32.1		70.3	579.2	69.5	1.000016
72000.0	43.6	-31.5		68.5	580.0	57.6	1.000015
72500.0	42.6	-31.5		66.9	580.0	51.6	1.000015
73000.0	41.6	-31.5		65.3	580.0	51.3	1.000015
73500.0	40.6	-31.5		63.8	580.0	57.3	1.000014
74000.0	39.7	-31.5		62.4	580.0	62.2	1.000014
74500.0	38.8	-31.5		60.9	580.0	66.6	1.000014
75000.0	37.9	-31.5		59.5	580.0	71.2	1.000013
75500.0	37.0	-31.5		58.2	580.0	75.9	1.000013
76000.0	36.2	-31.5		56.8	580.0	76.0	1.000013
76500.0	35.3	-31.5		55.5	580.0	76.1	1.000012
77000.0	34.5	-31.5		54.2	580.0	77.2	1.000012
77500.0	33.7	-31.3		52.9	580.3	82.2	1.000012
78000.0	32.9	-30.7		51.6	581.0	88.9	1.000011
78500.0	32.2	-30.1		50.3	581.6	88.0	1.000011
79000.0	31.5	-29.6		49.0	582.5	63.1	1.000011
79500.0	30.7	-29.0		47.0	583.3	76.1	1.000011
80000.0	30.0	-28.4		46.6	584.0	72.6	1.000010
80500.0	29.3	-28.5		45.3	583.9	67.4	1.000010
81000.0	28.7	-28.6		44.5	583.0	63.1	1.000010
81500.0	28.0	-28.7		43.5	583.0	64.0	1.000010
82000.0	27.4	-28.4		42.5	583.5	66.9	1.000009
82500.0	26.8	-28.9		41.6	583.3	69.6	1.000009
83000.0	26.2	-29.0		40.7	583.2	71.6	1.000009
83500.0	25.6	-29.2		39.6	583.1	73.5	1.000009

GEODETIC COORDINATES
32.00865 LAT DEG
106.09965 LON DEG

UNPDP AIR DATA
2450010221
HOLLOWAY
TABLE 15 Cont'd

STATION ALTITUDE 11260.9 FEET ASL
2 SEP 62
0800 HRS MDT
ASCENSION I.O. 221

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	SOUND METERS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
64000.0	25.0	-49.3		30.9	562.9	75.4	1.000009
64500.0	24.4	-48.9		37.9	583.3	76.4	1.000009
65000.0	23.9	-48.4		37.0	584.0	61.3	1.000009
65500.0	23.3	-47.9		30.1	584.7	64.1	1.000009
66000.0	22.8	-47.4		35.2	585.4	65.5	1.000009
66500.0	22.3	-46.9		34.5	585.0	66.5	1.000009
67000.0	21.8	-46.4		33.5	585.7	67.5	1.000007
67500.0	21.3	-45.8		32.0	587.4	67.9	1.000007
68000.0	20.8	-45.3		31.0	588.0	68.2	1.000007
68500.0	20.3	-44.8		31.0	588.7	68.5	1.000007
69000.0	19.9	-44.4		30.5	589.2	68.7	1.000007
69500.0	19.4	-44.0		29.0	589.0	69.0	1.000007
70000.0	19.0	-44.7		29.0	588.8	69.2	1.000006
70500.0	18.6	-44.8		28.4	588.7	69.6	1.000006
71000.0	18.2	-45.0		27.7	588.5	91.2	1.000006
71500.0	17.8	-45.1		27.1	588.3	92.6	1.000006
72000.0	17.4	-44.9		26.5	588.5	93.3	1.000006
72500.0	17.0	-44.8		25.9	588.7	93.6	1.000006
73000.0	16.6	-44.7		25.3	588.9	93.6	1.000006
73500.0	16.2	-44.5		24.7	589.1	79.0	1.000005
74000.0	15.9	-44.4		24.2	589.3	74.4	1.000005
74500.0	15.5	-44.2		23.6	589.4	70.1	1.000005
75000.0	15.2	-44.1		23.1	589.6	68.2	1.000005
75500.0	14.8	-43.9		22.6	589.8	66.9	1.000005
76000.0	14.5	-43.8		22.0	590.0	69.5	1.000005
76500.0	14.2	-43.7		21.5	590.2	72.1	1.000005
77000.0	13.9	-43.5		21.0	590.4	72.4	1.000005
77500.0	13.6	-43.4		20.6	590.5	70.4	1.000005
78000.0	13.3	-43.2		20.1	590.7	68.4	1.000004
78500.0	13.0	-43.1		19.6	590.9		1.000004
79000.0	12.7	-42.7		19.2	591.3		1.000004
79500.0	12.4	-42.4		18.7	591.6		1.000004
80000.0	12.1	-42.1		18.3	592.2		1.000004
80500.0	11.9	-41.4		17.9	592.6		1.000004

STATION ALTITUDE 4126.59 FEET MSL
2 SEP. 62 0800 HRS MDT
ASCENSION NO. 221

MANDATORY LEVELS
2450010221
HOLLOMAN
TABLE 16

GEODEIC COORDINATES
32-00065, LAT DEG
100-09965, LONG DEG

PRESSURE MILLIBARS	GEO-POTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	WIND DATA	
				DIRECTION (DEGREES TRUE)	SPEED KNOTS
850.0	5028.	25.8	89.	127.0	1.8
800.0	6773.	22.0	50.	150.0	3.4
750.0	8611.	19.2	50.	175.9	4.8
700.0	10545.	14.7	50.	52.3	5.5
650.0	12545.	9.1	60.	80.0	12.4
600.0	14741.	2.9	80.	60.7	14.5
550.0	17043.	-2.6	92.	50.4	15.7
500.0	19408.	-6.7	30.	44.4	10.9
450.0	22174.	-10.9	30.	37.0	12.0
400.0	25109.	-17.6	40.	19.2	10.3
350.0	28338.	-25.5	41.	351.3	10.2
300.0	31952.	-33.7	30.	339.4	14.7
250.0	36062.	-44.3		337.7	23.2
200.0	40846.	-55.4		320.4	23.5
175.0	43610.	-59.0		337.2	17.8
150.0	46742.	-62.5		332.0	20.9
125.0	50399.	-65.6		344.3	23.6
100.0	54783.	-69.6		19.2	14.1
80.0	59217.	-64.5		35.3	3.4
70.0	61913.	-63.2		110.2	7.7
60.0	65033.	-60.8		92.5	12.2
50.0	68410.	-54.3		110.0	0.0
40.0	73534.	-51.5		60.3	17.4
30.0	79648.	-48.4		72.0	20.1
25.0	83611.	-49.3		75.2	20.8
20.0	88462.	-44.4		80.7	20.7
15.0	94779.	-44.0		65.4	20.1

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

STATION ALTITUDE 4051.37 9500 MSL
 2 SEP. 82
 ASCENSION NO. 90

SIGNIFICANT LEVEL DATA
 245C1P0090

16-37
 TABLE 17

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
931.9	26.1	13.6	46.0
874.5	25.6	8.6	34.0
850.0	25.3	10.4	39.0
783.2	21.9	7.7	40.0
760.0	14.9	2.4	43.0
648.5	8.6	1.1	59.0
611.0	4.2	-0.0	75.0
594.0	2.2	-3.9	64.0
576.3	.6	-6.2	61.0
567.6	-1.1	-6.5	62.0
559.7	-1.4	-8.4	59.0
548.5	-4.0	-6.9	80.0
541.4	-3.1	-8.7	65.0
537.2	-3.9	-7.5	76.0
533.1	-3.7	-8.5	69.0
516.2	-4.0	-15.3	41.0
520.0	-6.0	-14.7	50.0
483.0	-8.1	-17.1	48.0
435.5	-11.2	-29.1	21.0
400.0	-16.5	-30.3	29.0
347.6	-25.3	-36.2	35.0
300.0	-33.4	-44.6	31.0
269.8	-39.7	-49.6	32.0
250.0	-43.4		
200.0	-54.8		
163.4	-61.9		
158.8	-59.7		
150.0	-62.1		
129.6	-66.5		
125.3	-65.7		
114.3	-68.8		
100.0	-69.0		
70.0	-63.8		
62.6	-63.1		
59.8	-59.8		
54.2	-59.1		
50.0	-55.4		
40.6	-50.2		
35.4	-52.2		
30.0	-48.2		

STATION ALTITUDE 4051.7 6900 HMS NST
 2 SEP. 82
 ASCENSION NO. 90

SIGNIFICANT LEVEL DATA

2450100000

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

TABLE 17 Cont'd

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
20.0 89002.7	-44.3		
11.4 101522.6	-40.7		
17.5 103387.9	-38.2		
10.0 104306.2	-35.2		
7.0 112750.1	-33.4		
5.0 120542.5	-36.5		

UPPER AIR DATA
245C180090
15-37
TABLE 17 Cont'd

STATION ALTITUDE 4351.77 FEET MSL
2 SEP. 82 0900 HRS MDT
ASCENSION NO. 90

GEODETIC COORDINATES
22-40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE FSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TM)	SPEED KNOTS	INDEX OF REFRACTION
4051.4	881.9	26.1	46.0	1719.8	676.2	11.0	1.9	1.000293
4300.0	868.3	25.5	35.2	1607.7	675.0	42.2	1.6	1.000274
5000.0	853.4	25.3	38.3	1590.5	674.9	77.5	1.9	1.000273
5500.0	838.7	24.7	39.2	975.4	674.3	97.8	2.7	1.000270
6000.0	824.2	24.0	39.4	961.0	673.4	107.2	3.4	1.000265
6500.0	810.0	23.3	39.6	946.8	672.5	109.7	2.9	1.000260
7000.0	796.0	22.6	39.8	932.8	671.7	107.5	2.6	1.000255
7500.0	782.2	21.3	40.0	919.1	670.8	95.8	2.2	1.000250
8000.0	768.5	20.7	40.5	704.5	669.5	87.7	4.1	1.000246
8500.0	755.0	19.6	41.0	264.1	668.1	83.2	5.8	1.000241
9000.0	741.7	18.5	41.5	861.3	666.8	79.6	7.4	1.000236
9500.0	728.6	17.4	41.9	869.3	665.5	75.8	8.9	1.000231
10000.0	715.8	16.3	42.4	258.7	664.2	73.0	10.1	1.000227
10500.0	703.2	15.2	42.9	846.3	662.6	70.6	11.2	1.000222
11000.0	690.7	13.3	43.8	835.2	661.2	71.6	12.0	1.000219
11500.0	678.2	12.3	49.6	824.4	659.5	74.5	12.6	1.000217
12000.0	666.0	10.6	53.4	813.9	657.8	76.6	13.2	1.000214
12500.0	654.0	9.3	57.2	803.5	656.0	78.1	13.7	1.000211
13000.0	642.1	7.8	61.6	793.0	654.3	79.5	14.0	1.000206
13500.0	630.4	6.4	66.6	782.5	652.6	80.9	14.1	1.000203
14000.0	618.8	5.0	71.6	772.1	651.0	81.0	14.3	1.000200
14500.0	607.4	3.6	72.7	761.8	649.3	79.7	14.6	1.000198
15000.0	596.1	2.4	75.4	751.3	647.7	76.5	14.6	1.000191
15500.0	585.0	1.3	78.5	740.6	646.3	70.5	14.5	1.000186
16000.0	574.1	.3	81.3	729.6	645.0	65.5	14.5	1.000182
16500.0	563.2	-.7	84.5	719.6	643.8	60.8	14.8	1.000178
17000.0	552.6	-2.2	87.5	710.7	641.2	56.5	15.1	1.000177
17500.0	542.1	-3.2	90.5	698.0	640.6	52.4	15.5	1.000172
18000.0	531.8	-3.7	93.7	686.1	640.2	52.6	15.7	1.000169
18500.0	521.7	-4.6	96.9	673.8	639.6	53.5	15.9	1.000162
19000.0	511.9	-5.8	100.1	662.7	638.9	58.8	15.6	1.000158
19500.0	501.9	-7.0	103.3	652.9	637.5	63.7	15.6	1.000156
20000.0	492.2	-8.1	106.5	643.3	636.1	65.4	14.6	1.000153
20500.0	482.7	-9.1	109.7	633.7	634.6	66.2	13.5	1.000150
21000.0	473.3	-10.2	112.9	622.9	633.9	63.0	11.9	1.000146
21500.0	464.1	-11.3	116.1	612.2	633.1	37.3	11.0	1.000142
22000.0	455.1	-12.4	119.3	601.7	632.4	49.0	11.1	1.000139
22500.0	446.2	-13.5	122.5	591.4	631.6	42.7	11.7	1.000136
23000.0	437.5	-14.6	125.7	581.2	630.8	37.8	12.4	1.000133
23500.0	428.9	-15.7	128.9	571.2	629.5	34.7	12.7	1.000130

STATION ALTITUDE 4051.77 FEET MSL
2 SEP. 82 0900 HRS MDT
ASCENSION NO. 90

UPPER AIR DATA

2450190090

15-27

TABLE 17 Cont'd

GEODETIC COORDINATES
32.4017° LAT DEG
106.31232° LONG DEG

GEOMETRIC ALTITUDE -SL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24500.0	420.4	-13.4	-29.5	24.3	563.5	628.0	32.2	12.6	1.000128
24500.0	412.0	-14.7	-29.8	26.2	555.0	626.5	28.7	12.7	1.000127
25000.0	403.9	-15.9	-30.1	28.1	546.7	625.0	24.8	12.7	1.000125
25500.0	395.8	-17.2	-30.7	29.5	538.4	623.4	21.4	14.2	1.000123
26000.0	387.7	-18.5	-31.6	30.3	530.1	621.9	18.9	15.6	1.000121
26500.0	379.6	-19.7	-32.4	31.2	522.0	620.3	16.9	17.1	1.000119
27000.0	371.5	-21.0	-33.3	32.1	514.0	618.7	14.7	18.1	1.000117
27500.0	363.5	-22.3	-34.1	33.0	506.1	617.1	12.6	18.1	1.000115
28000.0	355.3	-23.6	-35.0	33.8	498.4	615.5	10.5	17.7	1.000113
28500.0	347.2	-24.9	-35.9	34.7	490.8	613.9	8.4	17.1	1.000111
29000.0	339.1	-26.1	-37.1	35.6	483.3	612.4	6.3	16.3	1.000109
29500.0	335.4	-27.3	-38.3	36.4	475.9	611.0	4.2	15.6	1.000107
30000.0	328.3	-28.6	-39.5	37.3	468.5	609.5	2.1	14.9	1.000105
30500.0	321.4	-29.9	-40.7	38.2	461.2	608.0	0.0	15.1	1.000103
31000.0	314.6	-30.8	-41.9	39.1	454.0	606.6	0.0	15.4	1.000102
31500.0	308.0	-31.9	-43.1	40.0	446.8	605.1	0.0	15.1	1.000100
32000.0	301.5	-33.1	-44.3	40.9	439.6	603.6	0.0	14.8	1.000098
32500.0	295.1	-34.3	-45.4	41.8	432.4	602.1	0.0	15.3	1.000097
33000.0	288.7	-35.5	-46.4	42.7	425.2	600.6	0.0	15.9	1.000095
33500.0	282.4	-36.8	-47.5	43.6	418.0	599.1	0.0	16.4	1.000093
34000.0	276.3	-38.0	-48.5	44.5	410.8	597.6	0.0	17.0	1.000092
34500.0	270.3	-39.2	-49.5	45.4	403.6	596.1	0.0	17.6	1.000090
35000.0	264.4	-40.4	-50.4	46.3	396.4	594.6	0.0	18.1	1.000088
35500.0	258.5	-41.6	-51.6	47.2	389.2	593.1	0.0	18.7	1.000087
36000.0	252.8	-42.8	-52.8	48.1	382.0	591.6	0.0	19.3	1.000085
36500.0	247.1	-44.0	-54.0	49.0	374.8	590.1	0.0	19.9	1.000084
37000.0	241.5	-45.2	-55.2	49.9	367.6	588.6	0.0	20.5	1.000082
37500.0	235.9	-46.4	-56.4	50.8	360.4	587.1	0.0	21.1	1.000081
38000.0	230.3	-47.5	-57.5	51.7	353.2	585.6	0.0	21.7	1.000079
38500.0	225.3	-48.7	-58.7	52.6	346.0	584.1	0.0	22.3	1.000078
39000.0	220.1	-49.9	-59.9	53.5	338.8	582.6	0.0	22.9	1.000077
39500.0	215.1	-51.1	-61.1	54.4	331.6	581.1	0.0	23.5	1.000075
40000.0	210.2	-52.3	-62.3	55.3	324.4	579.6	0.0	24.1	1.000074
40500.0	205.4	-53.6	-63.6	56.2	317.2	578.1	0.0	24.7	1.000073
41000.0	200.7	-54.8	-64.8	57.1	310.0	576.6	0.0	25.3	1.000071
41500.0	195.9	-55.5	-65.5	58.0	302.8	575.1	0.0	25.9	1.000070
42000.0	191.3	-56.6	-66.6	58.9	295.6	573.6	0.0	26.5	1.000068
42500.0	186.7	-57.2	-67.2	59.8	288.4	572.1	0.0	27.1	1.000067
43000.0	182.3	-58.1	-68.1	60.7	281.2	570.6	0.0	27.7	1.000066
43500.0	177.9	-59.0	-69.0	61.6	274.0	569.1	0.0	28.3	1.000064

STATION ALTITUDE 4051.77 FEET MSL
 1 SEP 82 0900 HRS PDT
 ASCENSION NO. 90

UPPER AIR DATA

245C180090
 LC-37

TABLE 17 Cont'd

GEODETIC COORDINATES
 32.46175 LAT DEG
 106.71232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	173.7	-59.6		283.5	569.1	353.3	17.6	1.000063
44500.0	169.5	-60.6		277.9	563.0	345.9	21.0	1.000062
45000.0	165.3	-61.5		272.3	566.8	341.3	24.4	1.000061
45500.0	161.5	-61.0		265.3	567.4	339.9	26.7	1.000059
46000.0	157.6	-60.0		257.7	568.8	339.1	28.7	1.000057
46500.0	153.8	-61.0		252.7	567.4	340.1	28.4	1.000056
47000.0	150.1	-62.1		247.8	566.0	340.9	27.9	1.000055
47500.0	146.5	-62.3		242.6	565.0	340.0	25.2	1.000054
48000.0	142.9	-63.5		237.5	564.0	339.1	22.6	1.000053
48500.0	139.4	-64.3		232.5	563.0	342.5	21.6	1.000052
49000.0	136.0	-65.0		227.6	562.0	346.3	20.7	1.000051
49500.0	132.6	-65.8		222.8	561.0	350.3	20.8	1.000050
50000.0	129.4	-66.5		218.1	560.0	354.3	21.0	1.000049
50500.0	126.2	-65.3		212.1	560.9	358.7	20.6	1.000047
51000.0	123.1	-66.3		207.7	560.2	3.4	20.1	1.000046
51500.0	120.0	-67.2		203.0	559.1	6.6	20.0	1.000045
52000.0	117.0	-68.0		198.8	558.0	9.4	19.9	1.000044
52500.0	114.1	-68.8		194.6	556.9	13.1	20.3	1.000043
53000.0	111.3	-68.8		189.7	556.9	17.5	21.2	1.000042
53500.0	108.5	-68.9		185.0	556.8	22.2	21.7	1.000041
54000.0	105.8	-68.5		180.4	556.8	26.5	21.4	1.000040
54500.0	103.1	-69.0		174.0	556.7	35.0	21.1	1.000039
55000.0	100.6	-69.0		171.6	556.6	44.7	19.0	1.000038
55500.0	98.1	-68.7		167.1	557.0	57.9	15.6	1.000037
56000.0	95.6	-68.4		162.7	557.5	68.8	13.1	1.000036
56500.0	93.3	-68.0		158.4	555.0	81.7	10.6	1.000035
57000.0	91.0	-67.6		154.7	555.5	92.7	8.4	1.000034
57500.0	88.7	-67.3		150.1	559.0	88.4	5.4	1.000033
58000.0	86.5	-66.9		146.7	559.5	73.9	2.5	1.000033
58500.0	84.4	-66.5		142.3	560.0	56.0	2.7	1.000032
59000.0	82.3	-66.2		138.4	560.5	41.7	3.1	1.000031
59500.0	80.3	-65.8		134.9	561.0	58.5	1.8	1.000030
60000.0	78.3	-65.4		131.3	561.5	156.7	4.0	1.000029
60500.0	76.4	-65.1		127.8	562.0	170.0	6.3	1.000028
61000.0	74.5	-64.7		124.5	562.5	178.0	6.7	1.000026
61500.0	72.6	-64.3		121.3	563.0	184.9	7.7	1.000027
62000.0	70.8	-64.0		118.0	563.4	176.2	4.6	1.000026
62500.0	69.1	-63.7		115.0	563.8	158.3	2.1	1.000026
63000.0	67.4	-63.6		111.7	564.5	106.9	2.3	1.000025
63500.0	65.8	-63.4		108.7	564.2	107.6	6.7	1.000024

STATION ALTITUDE 4051.37 FEET MSL
2 SEP. 82 0900 HRS MDT
ASCENSION NO. 90

UPPER AIR DATA
245C1P0090
1C-37
TABLE 17 Cont'd

GEOGETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
6400.0	64.2	-62.3		104.5	564.4	102.5	7.1	1.000024
6450.0	62.6	-63.1		103.9	564.6	101.6	9.1	1.000023
6500.0	61.1	-61.6		100.5	567.0	101.2	11.0	1.000022
6550.0	59.6	-59.8		97.4	569.1	100.2	12.3	1.000021
6600.0	58.2	-59.6		95.0	569.3	98.6	12.3	1.000021
6650.0	56.8	-59.4		92.6	569.5	97.1	12.4	1.000021
6700.0	55.5	-59.3		90.3	569.8	96.1	11.9	1.000020
6750.0	54.1	-59.0		88.1	570.0	90.6	11.3	1.000020
6800.0	52.9	-58.0		85.6	571.5	87.4	11.0	1.000019
6850.0	51.6	-56.9		82.1	573.0	84.8	11.0	1.000019
6900.0	50.4	-55.8		80.7	574.4	82.2	11.0	1.000018
6950.0	49.2	-55.0		78.6	575.6	77.3	11.0	1.000017
7000.0	48.1	-54.4		76.6	576.2	72.4	11.1	1.000017
7050.0	47.0	-53.8		74.6	576.9	69.1	11.4	1.000017
7100.0	45.9	-53.2		72.7	577.7	67.4	11.8	1.000016
7150.0	44.8	-52.7		70.8	578.5	65.8	12.2	1.000016
7200.0	43.8	-52.1		69.0	579.2	68.0	13.7	1.000015
7250.0	42.8	-51.5		67.2	580.0	70.0	15.3	1.000015
7300.0	41.8	-50.9		65.5	580.8	71.4	16.8	1.000015
7350.0	40.8	-50.3		63.8	581.5	71.7	19.1	1.000014
7400.0	39.9	-50.5		62.4	581.3	72.0	19.5	1.000014
7450.0	38.9	-50.8		61.0	580.9	73.8	20.3	1.000014
7500.0	38.0	-51.1		59.7	580.5	77.0	20.5	1.000013
7550.0	37.2	-51.5		58.4	580.0	80.1	20.9	1.000013
7600.0	36.3	-51.8		57.2	579.6	82.7	20.4	1.000013
7650.0	35.5	-52.2		55.9	579.1	85.5	19.8	1.000012
7700.0	34.7	-51.7		54.5	579.7	88.2	19.3	1.000012
7750.0	33.9	-51.1		53.2	580.5	88.9	19.3	1.000012
7800.0	33.1	-50.6		51.8	581.2	89.6	19.4	1.000011
7850.0	32.3	-50.0		50.5	581.9	88.5	20.0	1.000011
7900.0	31.6	-49.5		49.2	582.7	84.4	21.6	1.000011
7950.0	30.9	-48.9		48.0	583.4	80.9	23.2	1.000011
8000.0	30.2	-48.3		46.8	584.1	77.5	25.0	1.000010
8050.0	29.5	-48.1		45.7	584.6	74.3	26.7	1.000010
8100.0	28.8	-48.0		44.6	584.5	71.4	28.4	1.000010
8150.0	28.2	-47.9		43.6	584.7	70.5	29.6	1.000010
8200.0	27.5	-47.8		42.6	584.8	70.9	30.4	1.000009
8250.0	26.9	-47.7		41.6	585.0	71.1	31.2	1.000009
8300.0	26.3	-47.6		40.6	585.1	72.1	31.6	1.000009
8350.0	25.7	-47.5		39.7	585.2	76.1	31.9	1.000009

STATION ALTITUDE 4051.77 FEET MSL
2 SEP. 82 0900 HRS MDT
ASCENSION NO. 90

UPPER AIR DATA
24501P0090
15-17
TABLE 17 Cont'd

GEODETTIC COORDINATES
32.40175 LAT DEG
106.51232 LON DEG

GEOMETRIC ALTITUDE -SL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TM)	SPEED KNOTS	INDEX OF REFRACTION
84000.0	25.1	-47.4		38.8	585.4	79.0	32.3	1.000009
84500.0	24.6	-47.3		37.9	585.5	81.7	32.7	1.000008
85000.0	24.0	-47.2		37.0	585.7	84.2	33.1	1.000008
85500.0	23.5	-47.0		36.2	585.8	86.6	33.5	1.000008
86000.0	22.9	-46.9		35.3	585.9	88.8	33.0	1.000008
86500.0	22.4	-46.8		34.5	586.1	90.9	32.7	1.000008
87000.0	21.9	-46.7		33.7	586.2	93.2	31.6	1.000008
87500.0	21.4	-46.6		32.9	586.3	96.3	30.1	1.000007
88000.0	20.9	-46.5		32.2	586.5	99.9	28.6	1.000007
88500.0	20.5	-46.4		31.4	586.6	103.8	27.1	1.000007
89000.0	20.0	-46.3		30.7	586.8	107.6	25.9	1.000007
89500.0	19.6	-46.1		30.0	587.0	101.1	24.7	1.000007
90000.0	19.1	-45.9		29.3	587.3	99.4	23.5	1.000007
90500.0	18.7	-45.7		28.6	587.6	97.3	23.4	1.000006
91000.0	18.3	-45.4		28.0	587.9	95.2	23.3	1.000006
91500.0	17.9	-45.2		27.3	588.2	93.1	23.2	1.000006
92000.0	17.5	-45.0		26.7	588.4	90.9	23.3	1.000006
92500.0	17.1	-44.8		26.1	588.7	88.7	23.4	1.000006
93000.0	16.7	-44.6		25.5	589.0	86.5	23.5	1.000006
93500.0	16.3	-44.4		24.9	589.3	84.3	23.7	1.000006
94000.0	16.0	-44.1		24.3	589.5	82.1	24.8	1.000005
94500.0	15.6	-43.9		23.7	589.8	80.1	26.5	1.000005
95000.0	15.3	-43.7		23.2	590.1	78.3	29.2	1.000005
95500.0	14.9	-43.5		22.7	590.4	76.8	30.1	1.000005
96000.0	14.6	-43.3		22.1	590.7	74.0	31.7	1.000005
96500.0	14.3	-43.1		21.6	590.9	79.5	33.2	1.000005
97000.0	14.0	-42.9		21.1	591.2	80.9	34.8	1.000005
97500.0	13.7	-42.6		20.6	591.5	82.1	36.2	1.000005
98000.0	13.4	-42.4		20.2	591.8	82.9	36.1	1.000004
98500.0	13.1	-42.2		19.7	592.0	83.8	36.0	1.000004
99000.0	12.8	-42.0		19.2	592.3	84.6	35.9	1.000004
99500.0	12.5	-41.8		18.8	592.6	84.6	36.2	1.000004
100000.0	12.2	-41.6		18.4	592.9	83.2	37.2	1.000004
100500.0	11.9	-41.3		17.9	593.1	81.8	38.1	1.000004
101000.0	11.7	-41.1		17.5	593.4	80.5	39.1	1.000004
101500.0	11.4	-40.9		17.1	593.7	77.9	40.1	1.000004
102000.0	11.2	-40.2		16.7	594.6	74.6	41.3	1.000004
102500.0	10.9	-39.5		16.3	595.5	71.4	42.6	1.000004
103000.0	10.7	-38.8		15.9	596.4	68.7	44.0	1.000004
103500.0	10.6	-37.9		15.5	597.5	69.0	44.5	1.000003

STATION ALTITUDE 4051.17 FEET PSL
2 SEP. 82 0900 HRS MDT
ASCENSION NO. 90

UPPER AIR DATA
2450180090
LC-37
TABLE 17 Cont'd

GEODEIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

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	
134000.0	10.2	-36.6		15.1	599.2	69.9	44.2	1.000003
104500.0	10.0	-35.2		14.6	600.9	70.8	44.2	1.000003
105000.0	9.8	-35.2		14.3	600.9	71.7	44.2	1.000003
105500.0	9.6	-35.2		14.0	600.9	74.6	43.4	1.000003
106000.0	9.4	-35.2		13.7	600.9	77.6	42.6	1.000003
106500.0	9.2	-35.2		13.4	600.9	80.6	42.0	1.000003
107000.0	9.0	-35.3		13.1	600.9	83.7	41.4	1.000003
107500.0	8.8	-35.3		12.9	600.9	86.1	40.6	1.000003
108000.0	8.6	-35.3		12.6	600.8	88.5	39.9	1.000003
108500.0	8.4	-35.3		12.3	600.8	91.1	39.2	1.000003
109000.0	8.2	-35.3		12.1	600.8	94.1	38.7	1.000003
109500.0	8.1	-35.3		11.8	600.6	96.4	38.2	1.000003
110000.0	7.9	-35.3		11.5	600.8	102.8	37.9	1.000003
110500.0	7.7	-35.3		11.3	600.8	107.2	37.8	1.000003
111000.0	7.6	-35.4		11.1	600.7	110.9	37.2	1.000002
111500.0	7.4	-35.4		10.8	600.7	113.5	35.3	1.000002
112000.0	7.2	-35.4		10.6	600.7	116.4	33.4	1.000002
112500.0	7.1	-35.4		10.4	600.7	119.6	31.7	1.000002
113000.0	6.9	-35.4		10.1	600.7	122.2	29.4	1.000002
113500.0	6.8	-35.3		9.9	600.8	124.0	26.6	1.000002
114000.0	6.6	-35.3		9.7	600.9	126.3	23.7	1.000002
114500.0	6.5	-35.2		9.5	601.0	129.2	21.0	1.000002
115000.0	6.4	-35.1		9.3	601.0	130.1	18.6	1.000002
115500.0	6.2	-35.1		9.1	601.1	129.0	16.4	1.000002
116000.0	6.1	-35.0		8.9	601.2	127.6	14.2	1.000002
116500.0	6.0	-35.0		8.7	601.2	125.6	12.1	1.000002
117000.0	5.8	-34.9		8.5	601.3	117.4	11.7	1.000002
117500.0	5.7	-34.9		8.3	601.4	107.4	12.3	1.000002
118000.0	5.6	-34.8		8.2	601.5	98.7	13.4	1.000002
118500.0	5.5	-34.7		8.0	601.5	91.4	14.6	1.000002
119000.0	5.3	-34.7		7.8	601.6			1.000002
119500.0	5.2	-34.6		7.6	601.7			1.000002
120000.0	5.1	-34.6		7.5	601.8			1.000002
120500.0	5.0	-34.5		7.3	601.8			1.000002

STATION ALTITUDE 4051.37 FEET MSL
2 SEP. 82
ASCENSION NO. 90

MANDATORY LEVELS
2450180090
LC-37
TABLE 18

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5112.	25.3	10.4	39.	83.6	2.1
800.0	623.	22.5	8.4	40.	111.8	2.5
750.0	867.	19.2	5.7	41.	87.1	6.6
700.0	1061.	14.5	2.6	43.	70.1	11.4
650.0	1263.	8.8	1.1	59.	78.6	13.8
600.0	1481.	2.8	-2.5	68.	78.5	14.7
550.0	1710.	-3.6	-7.1	77.	55.5	15.2
500.0	1957.	-6.0	-14.7	50.	64.0	15.5
450.0	2223.	-10.2	-24.6	20.	45.0	11.4
400.0	2519.	-16.5	-30.3	29.	23.1	13.3
350.0	2840.	-24.9	-35.9	35.	13.6	17.1
300.0	3205.	-33.4	-44.6	31.	347.5	14.9
250.0	3618.	-43.4			350.0	23.5
200.0	4072.	-54.8			335.2	18.3
175.0	4374.	-59.5			356.3	16.6
150.0	4689.	-62.1			340.9	27.9
125.0	5033.	-65.8			2	20.4
100.0	5493.	-69.0			46.6	17.6
80.0	5936.	-65.7			92.8	1.8
70.0	6203.	-63.8			174.2	3.5
60.0	6513.	-60.0			100.7	12.3
50.0	6889.	-55.4			51.0	11.0
40.0	7362.	-50.4			71.9	19.2
30.0	7978.	-48.2			77.0	25.3
25.0	8327.	-47.3			79.6	22.4
20.0	8689.	-46.3			102.7	26.0
15.0	9480.	-43.5			77.3	29.5
10.0	10393.	-35.2			70.7	44.2
7.0	11207.	-35.4			120.9	11.0
5.0	11970.	-34.5				

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

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

SIGNIFICANT LEVEL DATA

245C020445
WHITE SANDS
TABLE 19

STATION ALTITUDE 3956.00 FEET MSL
2 SEP. 82
ASCENSION NO. 445
0925 HRS MDT

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR GEMPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
	25.1	10.6	
864.0	27.0	8.0	43.0
877.6	26.6	10.3	30.0
860.9	25.1	10.2	26.0
850.0	21.9	8.1	39.0
780.3	14.8	3.0	41.0
700.0	3.2	.4	45.0
606.6	1.2	-5.3	82.0
589.9	-1.3	-5.5	62.0
564.1	-2.1	-6.3	55.0
556.0	-2.9	-10.0	73.0
548.1	-4.1	-8.2	59.0
535.0	-4.8	-24.8	72.0
517.5	-6.8	-16.2	15.0
500.0	-8.6	-15.2	47.0
488.2	-8.8	-19.1	58.0
481.6	-11.5	-23.9	43.0
449.8	-11.2	-33.3	22.0
447.9	-17.2	-30.9	14.0
400.0	-21.5	-31.7	29.0
373.2	-24.2	-37.1	29.0
357.1	-27.7	-40.9	27.0
333.5	-33.7	-47.2	24.0
300.0	-37.7	-50.0	26.0
279.8	-43.7		
250.0	-56.0		
200.0	-58.7		
165.0	-60.8		
165.2	-59.7		
161.6	-59.7		
157.8	-61.9		
150.0	-63.0		
146.8	-68.3		
115.6	-68.0		
105.9	-69.1		
100.0	-68.5		
66.2	-63.2		
77.0	-64.2		
70.0	-64.2		
65.9	-58.9		
62.1			

STATION ALTITUDE 3929.00 FEET MSL
2 SEP. 82
ASCENSION NO. 445

SIGNIFICANT LEVEL DATA

245C020445
WHITE SANDS
TABLE 19 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS "SL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
50.0 69172.4	-53.4		
42.2 72804.9	-50.4		
37.5 75346.1	-51.4		
34.5 77152.6	-47.5		
32.0 80203.7	-48.1		
23.1 85947.3	-44.7		
20.0 89144.7	-43.9		
17.7 91856.2	-44.7		
10.0 104760.0	-35.9		
9.4 106188.5	-35.0		

STATION ALTITUDE 3989.00 FEET MSL
2 SEP. 82 0925 HRS MDT
ASCENSION NO. 443

UPPER AIR DATA
2450323445
UNIT: SANDS
TABLE 20

GEODETIC COORDINATES
32.40243 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
3989.0	884.0	25.1	45.0	1026.9	674.6	350.0	1.000283
4000.0	883.7	25.2	39.5	1026.2	674.7	350.1	1.000283
4500.0	868.3	26.8	25.2	1007.6	676.4	360.0	1.000273
5000.0	853.7	25.6	36.0	989.9	675.2	22.7	1.000274
5500.0	839.0	24.6	39.3	976.2	674.1	71.0	1.000270
6000.0	824.5	24.0	39.7	961.8	673.3	87.2	1.000265
6500.0	810.2	23.3	40.1	947.0	672.6	91.5	1.000261
7000.0	796.2	22.7	40.3	932.7	671.8	94.9	1.000256
7500.0	782.5	22.0	40.9	918.7	671.1	93.1	1.000252
8000.0	768.8	20.9	41.2	906.1	669.8	87.5	1.000247
8500.0	755.2	19.8	42.2	893.9	668.4	83.5	1.000242
9000.0	742.0	18.6	42.9	881.8	667.0	80.6	1.000237
9500.0	728.9	17.4	43.5	869.9	665.6	76.4	1.000233
10000.0	716.1	16.3	44.2	858.2	664.2	75.1	1.000228
10500.0	703.3	15.1	44.8	846.6	662.6	75.1	1.000224
11000.0	690.8	13.7	46.4	835.4	661.2	76.1	1.000221
11500.0	678.3	12.2	53.1	824.6	659.5	77.4	1.000219
12000.0	666.0	10.8	57.9	814.7	657.8	79.1	1.000216
12500.0	653.9	9.3	62.6	803.1	656.1	80.7	1.000214
13000.0	642.0	7.8	67.4	792.7	654.4	82.0	1.000211
13500.0	630.3	6.3	72.1	782.5	652.6	82.1	1.000208
14000.0	618.9	4.8	75.6	772.4	650.8	82.5	1.000205
14500.0	607.6	3.3	81.6	762.5	649.1	80.7	1.000201
15000.0	596.3	2.0	89.8	752.7	647.2	80.7	1.000192
15500.0	585.2	0.8	91.3	742.4	645.6	76.7	1.000185
16000.0	574.2	-0.3	99.6	731.4	644.3	69.4	1.000181
16500.0	563.4	-1.4	99.3	720.5	643.0	67.2	1.000177
17000.0	552.7	-2.4	66.8	709.6	641.7	57.6	1.000176
17500.0	542.2	-3.4	66.7	698.9	640.3	53.5	1.000172
18000.0	531.9	-4.2	63.6	687.6	639.3	50.6	1.000168
18500.0	521.7	-4.6	32.3	676.2	638.7	52.7	1.000158
19000.0	511.7	-5.5	26.1	665.6	637.7	57.4	1.000154
19500.0	501.9	-6.6	43.9	655.1	636.5	67.9	1.000155
20000.0	492.2	-7.9	54.2	643.4	635.3	73.6	1.000154
20500.0	482.7	-8.7	45.2	632.2	633.9	76.4	1.000149
21000.0	473.3	-9.3	37.6	624.9	632.6	71.4	1.000145
21500.0	464.0	-10.3	31.6	614.5	631.9	67.2	1.000142
22000.0	455.0	-11.0	25.5	604.4	630.9	54.4	1.000138
22500.0	446.1	-11.4	18.7	593.4	630.4	47.0	1.000135
23000.0	437.3	-11.7	15.3	582.5	630.0	41.6	1.000132

GEODETIC COORDINATES
32.40047 LAT DEG
106.37033 LON DEG

UPPER AIR DATA
245020445
WHITE SANDS
TABLE 20 Cont'd

STATION ALTITUDE 3989.00 FEET PSL
± SEP. 82
0925 HRS MDT
ASCENSION NO. 445

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES C	TEMPERATURE DEWPOINT C	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	428.6	-12.9	-32.0	18.4	575.6	628.5	41.1	13.2	1.000170
24000.0	420.1	-14.2	-31.4	21.4	566.9	627.1	40.3	13.4	1.000128
24500.0	411.8	-15.4	-31.1	24.5	556.3	625.6	39.0	13.5	1.000126
25000.0	403.6	-16.6	-30.9	27.6	547.9	624.1	35.7	14.5	1.000125
25500.0	395.5	-17.9	-31.0	30.6	539.6	622.5	32.2	15.8	1.000123
26000.0	387.5	-19.2	-31.1	33.6	531.3	621.0	29.9	17.2	1.000121
26500.0	379.7	-20.4	-31.4	36.5	522.2	619.5	27.9	18.5	1.000119
27000.0	372.0	-21.7	-32.1	38.3	515.1	617.9	24.2	19.0	1.000117
27500.0	364.4	-23.0	-34.3	33.6	507.2	616.3	19.8	17.2	1.000115
28000.0	356.9	-24.2	-37.1	29.0	499.3	614.7	13.5	15.5	1.000113
28500.0	349.3	-25.3	-38.3	28.4	491.1	613.4	9.4	14.5	1.000111
29000.0	342.2	-26.4	-39.4	27.6	483.0	612.1	6.8	13.9	1.000109
29500.0	335.1	-27.5	-40.6	27.1	475.1	610.7	4.4	14.1	1.000107
30000.0	328.1	-28.6	-41.8	26.5	467.3	609.2	1.7	14.3	1.000105
30500.0	321.1	-29.8	-43.1	25.9	459.7	607.7	358.6	14.5	1.000103
31000.0	314.3	-31.1	-44.4	25.3	452.2	606.2	357.2	13.7	1.000101
31500.0	307.7	-32.3	-45.7	24.7	444.9	604.7	356.4	12.4	1.000100
32000.0	301.2	-33.5	-46.9	24.1	437.7	603.2	356.1	12.3	1.000098
32500.0	294.7	-34.7	-47.9	24.5	430.5	601.6	355.8	13.2	1.000096
33000.0	288.3	-36.0	-48.8	25.1	423.5	600.0	355.6	17.5	1.000095
33500.0	282.1	-37.2	-49.7	25.8	416.5	598.4	355.5	21.3	1.000093
34000.0	275.9	-38.4	-51.8	22.8**	409.5	596.9	355.3	24.9	1.000092
34500.0	269.8	-39.6	-54.9	17.6**	402.5	595.3	355.3	26.6	1.000090
35000.0	263.9	-40.8	-58.6	12.5**	395.7	593.8	355.2	27.9	1.000088
35500.0	258.1	-42.0	-63.6	7.3**	389.0	592.3	355.7	27.2	1.000087
36000.0	252.4	-43.2	-72.9	2.2**	382.3	590.8	356.4	26.5	1.000085
36500.0	246.7	-44.4			375.7	589.2	357.2	25.4	1.000084
37000.0	241.0	-45.7			369.2	587.5	357.3	25.0	1.000082
37500.0	235.5	-47.0			362.8	585.9	357.8	25.8	1.000081
38000.0	230.1	-48.3			356.5	584.2	356.0	26.8	1.000079
38500.0	224.8	-49.5			350.3	582.5	352.1	28.0	1.000078
39000.0	219.7	-50.8			344.2	580.9	350.5	28.7	1.000077
39500.0	214.6	-52.1			338.3	579.2	349.1	29.2	1.000075
40000.0	209.7	-53.4			332.4	577.5	345.6	26.1	1.000074
40500.0	204.9	-54.7			326.7	575.8	340.6	22.3	1.000073
41000.0	200.2	-55.9			321.1	574.2	337.8	19.3	1.000072
41500.0	195.5	-56.8			314.7	573.0	329.5	16.5	1.000070
42000.0	190.8	-57.6			308.4	571.9	338.4	15.5	1.000069
42500.0	186.3	-58.5			302.3	570.8	357.6	15.6	1.000067
43000.0	181.8	-59.3			295.8	570.1	357.4	14.7	1.000066

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

STATION ALTITUDE 3909.70 FEET MSL
2 SEP. 82 0925 HRS MDT
ASCENSION NO. 445

UPPER AIR DATA
245020445
WHITE SANDS
TABLE 20 Cont'd

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE -SL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	177.5	-59.5		289.4	569.5	159.0	14.9	1.000064
44000.0	173.2	-59.9		283.0	568.9	148.1	17.4	1.000063
44500.0	169.1	-62.4		276.8	568.3	142.3	21.4	1.000062
45000.0	165.0	-60.7		277.7	567.8	140.0	26.4	1.000060
45500.0	161.1	-59.7		262.9	569.2	142.1	27.8	1.000059
46000.0	157.2	-59.9		256.9	569.0	146.2	27.5	1.000057
46500.0	153.4	-60.9		251.8	567.5	146.9	24.4	1.000056
47000.0	149.7	-62.0		247.0	566.1	146.9	20.6	1.000055
47500.0	146.1	-63.1		242.3	564.6	142.7	18.5	1.000054
48000.0	142.5	-63.7		236.9	563.9	135.9	16.6	1.000053
48500.0	139.0	-64.2		231.7	563.1	132.1	20.6	1.000052
49000.0	135.5	-64.8		226.6	562.4	130.2	24.5	1.000050
49500.0	132.2	-65.3		221.6	561.6	136.0	26.0	1.000049
50000.0	128.9	-65.9		216.7	560.9	141.8	26.9	1.000048
50500.0	125.8	-66.4		211.9	560.1	135.0	23.4	1.000047
51000.0	122.7	-67.0		207.3	559.4	9.4	27.4	1.000046
51500.0	119.6	-67.5		202.7	558.6	13.4	20.1	1.000065
52000.0	116.7	-68.1		198.3	557.9	17.8	19.4	1.000044
52500.0	113.2	-68.2		193.5	557.7	21.6	20.4	1.000043
53000.0	111.0	-68.2		188.4	557.8	26.7	21.4	1.000042
53500.0	108.2	-68.1		183.8	557.9	35.2	22.5	1.000041
54000.0	105.5	-68.1		179.2	557.9	42.4	23.3	1.000040
54500.0	102.9	-68.6		175.2	557.2	48.6	22.4	1.000039
55000.0	100.3	-69.0		171.2	556.6	55.4	20.5	1.000038
55500.0	97.8	-69.0		166.9	556.6	65.8	16.2	1.000037
56000.0	95.4	-68.9		162.6	556.8	81.5	12.5	1.000036
56500.0	93.0	-68.8		158.5	556.9	105.6	9.5	1.000035
57000.0	90.6	-68.7		154.5	557.0	127.6	7.9	1.000034
57500.0	88.4	-68.6		150.5	557.2	128.5	5.1	1.000034
58000.0	86.2	-68.5		146.7	557.3	117.5	2.6	1.000033
58500.0	84.0	-67.3		142.2	558.9	60.4	3.4	1.000032
59000.0	82.0	-66.1		138.0	560.5	47.3	4.2	1.000031
59500.0	80.0	-65.0		133.8	562.1	67.7	2.2	1.000030
60000.0	78.0	-63.6		129.8	563.7	153.7	2.0	1.000029
60500.0	76.1	-63.3		126.7	564.3	191.7	6.7	1.000028
61000.0	74.2	-63.6		123.4	564.0	197.8	11.7	1.000027
61500.0	72.4	-63.8		120.5	563.6	204.8	10.9	1.000027
62000.0	70.6	-64.1		117.7	563.3	212.8	10.7	1.000026
62500.0	68.9	-64.2		114.9	563.1	211.7	6.1	1.000026
63000.0	67.2	-64.2		112.1	563.1	201.7	1.8	1.000025

STATION ALTITUDE 3955.00 FEET MSL
 2 SEP. 52
 ASCENSION NO. 445
 UPPER AIR DATA
 245°02045
 WHITE SANDS
 TABLE 20 Cont'd
 GEODETIC COORDINATES
 32.6004° LAT DEG
 106.3703° LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
6300.0	65.6	-63.8			109.2	563.7	114.1	3.8	1.000024
6400.0	64.0	-61.6			105.4	566.6	102.4	7.9	1.000023
6500.0	62.5	-59.4			101.8	569.5	106.2	9.4	1.000023
6600.0	61.0	-58.4			99.0	570.8	109.7	10.7	1.000022
6700.0	59.6	-57.2			96.4	571.6	109.3	11.7	1.000021
6800.0	58.2	-56.0			94.8	572.5	108.4	12.7	1.000021
6900.0	56.8	-54.6			91.4	573.3	102.9	13.1	1.000020
7000.0	55.5	-53.1			89.0	574.1	96.7	13.4	1.000020
7100.0	54.1	-51.6			86.6	574.8	89.7	13.8	1.000019
7200.0	52.9	-50.2			84.4	575.6	83.4	14.3	1.000019
7300.0	51.6	-48.8			82.1	576.4	81.9	14.3	1.000018
7400.0	50.4	-47.3			80.0	577.2	85.0	13.6	1.000018
7500.0	49.2	-45.9			78.0	577.9	86.3	12.9	1.000017
7600.0	48.1	-44.5			76.0	578.6	83.4	12.3	1.000017
7700.0	47.0	-43.1			74.1	578.9	79.7	11.9	1.000017
7800.0	45.9	-41.6			72.2	579.5	72.7	13.3	1.000016
7900.0	44.9	-40.2			70.5	580.0	67.1	14.7	1.000016
8000.0	43.8	-38.8			68.7	580.6	65.8	16.3	1.000015
8100.0	42.8	-37.3			67.0	581.1	64.9	17.9	1.000015
8200.0	41.8	-35.9			65.4	581.3	67.3	19.7	1.000015
8300.0	40.9	-34.5			64.0	581.1	70.7	21.6	1.000014
8400.0	39.9	-33.1			62.6	580.8	73.5	22.9	1.000014
8500.0	39.0	-31.6			61.2	580.6	76.4	23.0	1.000014
8600.0	38.1	-30.2			59.8	580.3	79.3	23.1	1.000013
8700.0	37.2	-28.8			58.4	580.6	72.1	23.2	1.000013
8800.0	36.4	-27.3			56.8	582.0	76.7	23.2	1.000013
8900.0	35.6	-25.9			55.2	583.4	76.5	23.6	1.000012
9000.0	34.7	-24.5			53.7	584.8	77.0	24.3	1.000012
9100.0	34.0	-23.1			52.4	585.1	77.4	25.0	1.000012
9200.0	33.2	-21.6			51.2	585.0	77.9	25.6	1.000011
9300.0	32.4	-20.2			50.1	584.9	78.2	26.2	1.000011
9400.0	31.7	-18.8			49.0	584.7	77.3	27.1	1.000011
9500.0	31.0	-17.3			47.9	584.6	76.5	28.5	1.000011
9600.0	30.3	-15.9			46.9	584.5	76.7	29.4	1.000010
9700.0	29.6	-14.5			45.9	584.7	77.3	29.7	1.000010
9800.0	28.9	-13.1			44.7	585.0	78.2	30.0	1.000010
9900.0	28.3	-11.6			43.6	585.4	83.1	29.8	1.000010
10000.0	27.6	-10.2			42.5	585.6	81.0	29.6	1.000009
10100.0	27.0	-8.8			41.6	586.2	84.4	29.6	1.000009
10200.0	26.4	-7.3			40.5	586.6	87.0	29.9	1.000009

STATION ALTITUDE 3929.7C FEET MSL
2 SEP. 82
ASCENSION NO. 445

UPPER AIR DATA
245C020445
WHITE SANDS
TABLE 20 Cont'd

GEODETIC COORDINATES
32.4000N LAT DEG
106.77033 LON DEG

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	
83500.0	25.8	-46.1		39.6	587.0	91.0	30.2	1.000009
84000.0	25.2	-45.9		38.7	587.3	97.3	29.9	1.000009
84500.0	24.7	-45.6		37.8	587.7	104.2	29.9	1.000008
85000.0	24.1	-45.3		36.9	588.1	109.9	29.7	1.000008
85500.0	23.6	-45.0		36.0	588.5	111.4	27.9	1.000008
86000.0	23.0	-44.7		35.1	588.8	113.1	26.1	1.000008
86500.0	22.5	-44.6		34.3	589.0	111.4	24.8	1.000008
87000.0	22.0	-44.4		33.6	589.2	107.4	23.8	1.000007
87500.0	21.5	-44.3		32.8	589.3	103.0	23.0	1.000007
88000.0	21.1	-44.2		32.0	589.5	98.4	23.1	1.000007
88500.0	20.6	-44.1		31.3	589.7	93.9	23.4	1.000007
89000.0	20.1	-43.9		30.6	589.8	88.9	23.9	1.000007
89500.0	19.7	-44.0		29.9	589.7	83.2	24.5	1.000007
90000.0	19.2	-44.2		29.3	589.5	77.9	25.9	1.000007
90500.0	18.8	-44.3		28.6	589.3	81.7	24.3	1.000006
91000.0	18.4	-44.4		28.0	589.2	89.0	22.3	1.000006
91500.0	18.0	-44.6		27.4	589.0	96.1	21.1	1.000006
92000.0	17.6	-44.6		26.8	589.0	95.8	21.9	1.000006
92500.0	17.2	-44.3		26.2	589.4	95.5	22.8	1.000006
93000.0	16.8	-43.9		25.6	589.8	91.0	24.8	1.000006
93500.0	16.5	-43.6		25.0	590.3	84.0	28.1	1.000006
94000.0	16.1	-43.2		24.4	590.7	78.5	31.7	1.000005
94500.0	15.7	-42.9		23.8	591.1	79.2	31.5	1.000005
95000.0	15.4	-42.6		23.3	591.6	80.9	30.6	1.000005
95500.0	15.1	-42.2		22.7	592.0	82.3	30.1	1.000005
96000.0	14.7	-41.9		22.2	592.5	81.6	31.2	1.000005
96500.0	14.4	-41.5		21.7	592.9	81.0	32.3	1.000005
97000.0	14.1	-41.2		21.2	593.3	81.5	33.6	1.000005
97500.0	13.8	-40.9		20.7	593.8	80.1	35.2	1.000005
98000.0	13.5	-40.5		20.2	594.2	79.8	36.9	1.000004
98500.0	13.2	-40.2		19.7	594.6	77.9	38.4	1.000004
99000.0	12.9	-39.8		19.1	595.1	74.0	39.8	1.000004
99500.0	12.6	-39.5		18.8	595.5	72.2	41.4	1.000004
100000.0	12.3	-39.1		18.4	595.9	71.8	43.2	1.000004
100500.0	12.1	-38.8		17.9	596.4	72.5	45.0	1.000004
101000.0	11.8	-38.5		17.5	596.8	73.2	46.8	1.000004
101500.0	11.6	-38.1		17.1	597.2	73.5	45.7	1.000004
102000.0	11.3	-37.8		16.7	597.7	83.1	44.2	1.000004
102500.0	11.1	-37.4		16.3	598.1	89.2	43.1	1.000004
103000.0	10.8	-37.1		16.0	598.5	92.8	41.0	1.000004

STATION ALTITUDE 3989.50 FEET MSL
2 SEP. 82 0925 HRS MDT
ASCENSION NO. 443

UPPER AIR DATA
245020445
WHITE SANDS
TABLE 20 Cont'd

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE PSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
10300.0	10.6	-16.8		13.6	595.0	96.6	38.9	1.000003
10400.0	12.3	-16.4		13.7	599.4			1.000003
10500.0	10.1	-16.1		14.9	599.8			1.000003
10600.0	9.9	-15.7		14.5	600.3			1.000003
10700.0	9.7	-15.4		14.2	600.7			1.000003
10800.0	9.5	-15.1		13.9	601.1			1.000003

STATION ALTITUDE 3955.00 FEET MSL
2 SEP. 82 0925 HRS MDT
ASCENSION NO. 443

MANDATORY LEVELS
2450020445
WHITE SANDS
TABLE 21

GEODEIC COORDINATES
32.40043 LAT DEG
126.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR °	DEWPOINT	PERCENT	DIRECTION	SPEED
		DEGREES	CENTIGRADE		DEGREES(TM)	KNOTS
950.0	5121.	25.1	10.2	79.	32.7	3.1
900.0	6361.	22.3	8.7	40.	97.8	3.0
750.0	8697.	19.3	6.7	42.	82.6	5.3
700.0	10630.	14.8	3.0	45.	75.3	12.6
650.0	12667.	8.8	2.4	64.	81.2	13.3
600.0	14820.	2.4	-1.7	74.	81.7	15.1
550.0	17107.	-2.7	-5.0	62.	54.5	15.7
500.0	19570.	-6.8	-16.2	47.	69.8	14.1
450.0	22244.	-11.5	-12.8	22.	50.2	11.4
400.0	25181.	-17.2	-30.9	79.	34.9	15.0
350.0	28416.	-25.2	-38.2	28.	9.8	14.6
300.0	32726.	-33.7	-47.2	24.	356.1	12.3
250.0	37132.	-43.7			356.7	26.1
200.0	40921.	-56.0			335.8	19.3
175.0	43437.	-59.7			352.6	16.2
150.0	46832.	-61.9			746.9	21.1
125.0	50488.	-60.6			352.4	22.8
100.0	54887.	-69.1			55.9	20.2
80.0	59284.	-65.0			67.1	2.3
75.0	61970.	-64.2			213.0	9.1
60.0	65100.	-59.7			109.6	11.3
50.0	68909.	-51.4			85.9	13.4
40.0	73660.	-50.9			73.1	22.9
30.0	79837.	-48.1			76.6	29.5
25.0	83820.	-45.7			90.5	29.9
20.0	88721.	-43.7			87.7	24.0
15.0	95062.	-42.1			87.7	20.1
10.0	104184.	-35.9				

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

STATION ALTITUDE 4351.00 FEET "SL"
2 SEP. 82 1015 HRS MDT
ASCENSION NO. 130

SIGNIFICANT LEVEL DATA

2450000130

JALLEN

TABLE 22

GEOGETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE GEOMETRIC WILLIAMS "SL FEET	ALTITUDE	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
850.8	4051.0	31.0	36.0
870.0	4415.0	29.0	32.0
890.0	5090.7	27.3	34.0
910.0	5955.2	25.1	40.0
930.0	7531.0	23.1	40.0
950.0	10626.1	15.6	43.0
970.0	13343.7	8.2	67.0
990.0	15015.5	3.8	80.0
1010.0	16366.5	-0.2	88.0
1030.0	17315.5	-1.9	74.0
1050.0	18791.0	-4.9	85.0
1070.0	19096.4	-5.2	65.0
1090.0	19630.1	-5.9	62.0
1110.0	20646.8	-7.9	65.0
1130.0	21831.1	-9.4	25.0
1150.0	23367.2	-11.3	20.0
1170.0	25279.8	-16.2	32.0
1190.0	25931.3	-17.1	24.0
1210.0	29422.5	-25.8	23.0
1230.0	32188.3	-32.3	24.0
1250.0	33670.4	-36.5	24.0
1270.0	36325.2	-43.2	
1290.0	38750.6	-49.0	
1310.0	41153.5	-54.4	
1330.0	46864.6	-59.8	
1350.0	45088.2	-58.1	
1370.0	47125.5	-60.9	
1390.0	49175.5	-64.8	
1410.0	49767.4	-64.6	
1430.0	51773.9	-66.7	
1450.0	53613.3	-69.3	
1470.0	55239.8	-69.0	
1490.0	55557.5	-69.7	
1510.0	56868.9	-66.5	
1530.0	58376.3	-66.9	
1550.0	59095.2	-57.6	
1570.0	60211.4	-66.2	
1590.0	62395.9	-62.7	
1610.0	62230.9	-62.7	
1630.0	66524.7	-56.4	

STATION ALTITUDE 4051.00 FEET MSL
 2 SEP. 82 1015 HRS MDT
 ASCENSION NO. 130

SIGNIFICANT LEVEL DATA

2430070130
 JALLEN

TABLE 22 Cont'd

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
50.0 6938.4	-34.3		
39.5 7423.5	-50.7		

STATION ALTITUDE 4051
2 SEP. 52
ASCENSION NO. 130

GEODETIC COORDINATES
37.16712 LAT DEG
106.49511 LONG DEG

UPPER AIR DATA
265003013C
JALLEN
TABLE 23

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	880.8	31.0	14.2	36.0	1001.8	691.8	40.0	1.9	1.000290
4500.0	867.4	28.8	10.6	32.3	995.2	672.8	60.6	1.6	1.000275
5000.0	852.7	27.5	10.2	33.7	987.4	677.4	89.1	1.6	1.000271
5500.0	838.1	26.3	10.4	36.8	969.6	674.0	112.7	1.9	1.000269
6000.0	823.7	25.0	10.5	40.0	956.7	674.7	131.0	2.5	1.000267
6500.0	809.5	24.4	9.9	40.0	947.3	673.9	147.1	3.4	1.000262
7000.0	795.6	23.8	9.4	40.0	928.2	673.2	165.1	3.7	1.000258
7500.0	781.9	23.1	8.8	40.0	914.2	672.4	144.0	3.0	1.000253
8000.0	768.2	22.3	7.9	40.5	902.0	671.0	134.6	3.1	1.000248
8500.0	754.7	20.8	7.0	40.9	890.1	669.6	115.2	3.2	1.000242
9000.0	741.5	19.5	6.1	41.4	872.7	668.1	91.5	3.5	1.000237
9500.0	728.5	18.3	5.2	41.9	864.7	666.7	87.6	5.5	1.000233
10000.0	715.7	17.1	4.3	42.4	855.2	665.2	87.8	7.4	1.000228
10500.0	703.2	15.9	3.3	42.9	843.9	663.7	95.4	8.9	1.000223
11000.0	690.6	14.6	3.2	46.3	832.4	662.2	97.8	10.2	1.000221
11500.0	678.2	13.2	3.2	50.7	821.5	660.7	94.0	11.1	1.000219
12000.0	666.0	11.9	3.2	55.1	810.5	659.1	92.5	11.6	1.000216
12500.0	654.0	10.5	3.0	59.5	799.7	657.6	92.0	11.8	1.000214
13000.0	642.3	9.1	2.7	64.0	789.1	656.0	91.5	11.4	1.000211
13500.0	630.6	7.8	2.3	68.2	778.6	654.4	88.9	11.0	1.000208
14000.0	619.1	6.5	1.8	72.1	768.0	652.8	87.7	10.9	1.000205
14500.0	607.7	5.2	1.3	76.0	757.5	651.3	87.3	11.5	1.000202
15000.0	596.5	3.8	0.7	79.9	747.2	649.7	86.7	12.3	1.000198
15500.0	585.4	2.6	-0.1	82.5	736.8	648.1	86.7	12.2	1.000194
16000.0	574.5	1.3	-1.0	85.1	726.6	646.6	84.7	11.2	1.000191
16500.0	563.8	-0.0	-1.6	87.7	716.6	645.0	87.7	9.5	1.000187
17000.0	553.2	-1.2	-4.2	79.9	706.4	643.5	79.4	8.4	1.000180
17500.0	542.7	-2.3	-6.0	75.4	696.1	642.1	59.9	7.9	1.000175
18000.0	532.4	-3.3	-6.4	75.1	685.5	640.6	50.8	7.7	1.000172
18500.0	522.3	-4.3	-6.6	82.8	675.0	639.6	45.7	7.4	1.000170
19000.0	512.3	-5.1	-7.5	71.4	664.4	638.5	41.8	7.0	1.000164
19500.0	502.5	-5.7	-11.7	62.7	653.4	637.7	41.8	7.5	1.000159
20000.0	492.6	-6.6	-12.5	63.1	643.0	636.6	41.6	7.9	1.000156
20500.0	483.4	-7.6	-13.1	66.6	633.0	635.4	38.0	8.4	1.000153
21000.0	474.0	-8.3	-16.2	53.1	622.7	634.4	37.9	9.0	1.000148
21500.0	464.6	-9.0	-21.2	56.2	612.4	633.5	38.4	9.7	1.000142
22000.0	455.7	-9.6	-25.7	25.5	602.1	632.6	39.7	10.4	1.000138
22500.0	446.8	-13.3	-25.6	27.2	591.9	631.8	39.0	11.0	1.000136
23000.0	438.1	-11.0	-25.0	26.6	581.8	631.0	36.7	11.3	1.000134
23500.0	429.5	-11.8	-25.8	30.1	572.2	630.0	33.2	11.7	1.000132

UPPER AIR DATA
2450070130
JALLEN

STATION ALTITUDE 4051.00 FEET "SL"
2 SEP. 82
ASCENSION NO. 130

GEODETIC COORDINATES
33-16712 LAT DEG
106-49511 LON DEG

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24500.0	421.0	-13.1	-26.7	30.7	563.5	628.5	29.2	11.1	1.000129
24500.0	412.7	-16.3	-27.6	11.2	555.0	627.0	27.3	11.3	1.000127
25000.0	404.5	-15.3	-28.5	11.7	546.7	625.5	25.7	11.6	1.000125
25500.0	396.5	-16.5	-30.2	29.3	537.9	624.3	25.1	12.2	1.000123
26000.0	388.5	-17.3	-32.9	24.0	528.7	623.3	24.1	13.0	1.000120
26500.0	380.6	-18.5	-34.1	23.8	519.5	621.8	21.7	14.2	1.000118
27000.0	372.8	-19.8	-35.2	23.7	512.4	620.2	18.9	15.4	1.000116
27500.0	365.2	-21.0	-36.3	23.6	504.5	618.7	18.1	16.4	1.000114
28000.0	357.8	-22.3	-37.5	23.4	496.6	617.2	17.0	17.1	1.000112
28500.0	350.5	-23.5	-38.6	23.3	488.9	615.6	15.0	17.1	1.000110
29000.0	343.3	-24.7	-39.8	23.1	481.4	614.1	10.5	17.1	1.000108
29500.0	336.3	-26.0	-40.9	23.0	473.9	612.5	2.6	17.3	1.000107
30000.0	329.2	-27.2	-41.8	23.2	466.2	611.1	155.6	17.6	1.000105
30500.0	322.3	-28.3	-42.7	23.4	458.5	609.6	130.7	17.6	1.000103
31000.0	315.5	-29.5	-43.7	23.6	451.1	608.1	148.7	17.6	1.000101
31500.0	308.9	-30.7	-44.6	23.8	443.3	606.7	149.4	17.5	1.000100
32000.0	302.4	-31.9	-45.6	23.9	436.5	605.2	151.6	18.7	1.000098
32500.0	296.0	-33.2	-46.7	24.0	429.6	603.5	153.8	20.2	1.000096
33000.0	289.6	-34.6	-48.0	24.0	422.9	601.7	156.1	21.7	1.000095
33500.0	283.4	-36.0	-49.2	24.0	416.3	599.9	158.1	23.2	1.000093
34000.0	277.2	-37.3	-51.5	21.0**	409.5	598.3	159.5	25.0	1.000092
34500.0	271.1	-38.6	-54.6	16.3**	402.6	596.7	159.5	26.8	1.000090
35000.0	265.2	-39.9	-58.2	12.0**	395.9	595.1	159.5	29.5	1.000088
35500.0	259.3	-41.1	-62.8	7.5**	389.4	593.4	159.5	30.1	1.000087
36000.0	253.6	-42.4	-70.4	2.9**	382.9	591.8	159.5	30.7	1.000085
36500.0	248.0	-43.6			376.4	590.2	159.5	31.2	1.000084
37000.0	242.4	-44.8			369.8	588.7	159.5	31.2	1.000082
37500.0	236.9	-46.0			363.4	587.1	159.5	30.5	1.000081
38000.0	231.6	-47.2			357.1	585.6	159.5	28.9	1.000081
38500.0	226.4	-48.4			350.9	584.0	159.5	27.3	1.000080
39000.0	221.2	-49.6			344.6	582.5	159.5	25.8	1.000078
39500.0	216.1	-50.7			338.4	581.1	159.5	25.1	1.000077
40000.0	211.1	-51.8			332.2	579.6	159.5	24.5	1.000075
40500.0	206.2	-52.9			326.3	578.1	159.5	23.1	1.000074
41000.0	201.4	-54.1			320.3	576.6	159.5	21.7	1.000073
41500.0	196.7	-54.9			314.0	575.5	159.5	21.2	1.000071
42000.0	192.0	-55.6			307.6	574.6	159.5	21.4	1.000070
42500.0	187.5	-56.4			301.3	573.6	159.5	21.3	1.000069
43000.0	183.1	-57.1			295.1	572.6	159.5	21.2	1.000067
43500.0	178.7	-57.6			289.1	571.7	159.5	21.2	1.000066

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

STATION ALTITUDE 4051.00 FEET "SL
2 SEP. 82
ASCENSION NO. 130

UPPER AIR DATA
243000Z
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
					KNOTS			
44000.0	174.5	-53.5		283.2	570.7	337.7	21.7	1.000063
44500.0	170.4	-59.3		277.5	569.7	340.9	24.3	1.000062
45000.0	166.3	-58.6		270.7	570.4	344.3	27.6	1.000060
45500.0	162.3	-58.7		263.7	570.6	346.6	30.3	1.000059
46000.0	158.4	-59.4		258.2	569.6	348.2	32.2	1.000058
46500.0	154.6	-60.0		252.8	568.7	348.4	33.5	1.000056
47000.0	150.9	-60.7		247.5	567.6	346.1	32.7	1.000055
47500.0	147.3	-61.6		242.5	566.6	339.5	32.0	1.000054
48000.0	143.7	-62.6		237.7	565.4	339.1	30.9	1.000053
48500.0	140.2	-63.5		233.0	564.1	337.2	29.7	1.000052
49000.0	136.8	-64.5		228.4	562.8	338.4	28.4	1.000051
49500.0	133.5	-64.6		222.9	562.6	345.8	26.8	1.000050
50000.0	130.2	-64.7		217.5	562.5	349.7	25.6	1.000048
50500.0	127.0	-65.3		212.8	561.7	352.9	24.1	1.000047
51000.0	123.8	-65.6		208.1	560.9	353.9	22.6	1.000046
51500.0	120.8	-66.4		203.4	560.1	359.1	21.2	1.000045
52000.0	117.8	-67.1		199.1	559.3	2.4	19.8	1.000044
52500.0	114.9	-67.8		194.8	558.3	6.2	18.6	1.000043
53000.0	112.0	-68.5		190.5	557.4	10.6	17.9	1.000042
53500.0	109.2	-69.1		186.5	556.4	15.4	17.4	1.000042
54000.0	106.5	-69.2		181.9	556.3	19.7	16.9	1.000041
54500.0	103.8	-69.1		177.7	556.4	23.7	16.3	1.000039
55000.0	101.2	-69.0		173.8	556.6	27.0	15.6	1.000038
55500.0	98.7	-69.6		168.9	555.9	31.1	12.4	1.000038
56000.0	96.2	-69.4		163.9	557.2	46.8	9.4	1.000036
56500.0	93.8	-67.4		152.9	558.8	67.4	7.0	1.000035
57000.0	91.5	-66.5		154.3	560.0	89.3	5.3	1.000034
57500.0	89.2	-64.7		150.5	559.8	122.8	5.2	1.000034
58000.0	87.0	-64.1		146.9	559.6	122.4	4.4	1.000033
58500.0	84.9	-66.3		143.0	560.3	121.8	3.6	1.000032
59000.0	82.8	-64.0		137.9	563.4	122.3	2.7	1.000031
59500.0	80.8	-63.8		134.4	563.7	125.2	1.8	1.000030
60000.0	78.8	-64.1		131.3	563.3	133.1	.8	1.000029
60500.0	76.9	-64.0		128.1	563.4	149.6	1.2	1.000029
61000.0	75.0	-63.7		124.7	562.9	154.4	1.8	1.000026
61500.0	73.2	-63.3		121.5	564.3	157.7	2.4	1.000027
62000.0	71.4	-63.0		118.2	564.8	142.8	3.3	1.000026
62500.0	69.7	-62.7		115.7	565.2	133.7	4.3	1.000026
63000.0	68.0	-62.7		112.5	565.2	130.5	4.8	1.000025
63500.0	66.3	-62.2		109.4	565.8	127.8	4.8	1.000024

STATION ALTITUDE 4031.00 FEET MSL
2 SEP. 52 1015 HRS MDT
ASCENSION NO. 13C

UPPER AIR DATA
2450070130
JALLER

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
64000.0	64.7	-61.4		106.5	346.9	116.3	4.3	1.000024
64500.0	63.2	-60.5		103.5	368.1	113.7	4.8	1.000023
65000.0	61.7	-59.7		100.7	369.6	115.5	5.7	1.000022
65500.0	60.2	-58.8		97.9	370.3	116.8	6.7	1.000022
66000.0	58.8	-58.0		95.2	371.5	112.5	6.6	1.000021
66500.0	57.4	-57.1		92.5	372.6	107.7	6.6	1.000021
67000.0	56.0	-56.3		90.0	373.6	99.7	6.5	1.000020
67500.0	54.7	-55.9		87.7	374.2	85.8	6.8	1.000020
68000.0	53.4	-55.5		85.5	374.8	77.5	7.4	1.000019
68500.0	52.2	-55.1		83.3	375.3	73.0	9.4	1.000019
69000.0	50.9	-54.6		81.2	375.9	77.7	11.7	1.000018
69500.0	49.7	-54.2		79.1	376.4	80.1	14.1	1.000018
70000.0	48.6	-53.9		77.7	376.9	75.0	15.5	1.000017
70500.0	47.5	-53.5		75.7	377.4	72.1	16.9	1.000017
71000.0	46.4	-53.1		73.4	377.8	68.0	18.4	1.000016
71500.0	45.3	-52.8		71.6	378.3	66.6	19.5	1.000016
72000.0	44.2	-52.4		69.9	378.8		20.6	1.000015
72500.0	43.2	-52.1		68.1	379.2			1.000015
73000.0	42.2	-51.7		66.4	379.7			1.000014
73500.0	41.2	-51.4		64.8	380.2			1.000014
74000.0	40.3	-51.0		63.2	380.7			1.000014

STATION ALTITUDE 4051 1015 HRS MST
2 SEP. 82
ASCENSION NO. 130

MANDATORY LEVELS
2450030130
JALLEN
TABLE 24

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TM)	SPEED KNOTS
850.0	5087.	27.3	10.1	34.	93.9	1.6
900.0	6836.	24.0	9.6	40.	144.8	3.3
750.0	8679.	20.3	6.7	41.	105.5	3.3
700.0	10618.	15.6	1.1	43.	96.9	9.3
650.0	12663.	10.0	2.9	61.	92.0	11.7
600.0	14829.	4.3	.9	79.	87.5	12.1
550.0	17131.	-1.5	-5.0	77.	67.0	8.2
500.0	19403.	-5.9	-12.0	62.	41.9	7.6
450.0	22280.	-10.1	-25.6	27.	39.6	10.6
400.0	25238.	-16.2	-29.0	32.	25.4	11.9
350.0	28495.	-23.6	-38.7	23.	14.8	17.1
300.0	32125.	-32.3	-46.0	24.	352.4	19.2
250.0	36246.	-43.2			358.7	31.0
200.0	41055.	-54.4			342.3	21.3
175.0	43936.	-58.5			337.0	21.6
150.0	47003.	-60.9			343.1	32.5
125.0	50672.	-65.6			354.6	23.2
100.0	55070.	-69.0			30.7	14.2
80.0	59497.	-63.9			127.1	1.4
70.0	62187.	-62.7			137.1	4.0
60.0	65326.	-58.7			116.9	6.7
50.0	69129.	-54.3			79.5	13.4
40.0	73858.	-50.9				

.. AT LEAST ONE ASSURED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.