

AD-A116 925

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
20403A ASSAULT BREAKER MISSILE NUMBER 0007 ROUND NUMBER M665.(U)
MAY 82 D C KELLER
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1238	2. GOVT ACCESSION NO. AD-A116 925	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 20403A Assault Breaker, Missile Number 0007 Round Number M6G5	5. TYPE OF REPORT & PERIOD COVERED	
	6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s) White Sands Meteorological Team	8. CONTRACT OR GRANT NUMBER(s) DA TASK 1F665702D127-02	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range New Mexico 88002	12. REPORT DATE May 82	
	13. NUMBER OF PAGES 57	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
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 20403A Assault Breaker Missile Number 0007, Round Number M6G5 presented in tabular form.		

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INTRODUCTION

20403A Assault Breaker, Missile Number 0007, Round Number M6G5, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0926 MDT, 08 May 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 and Jallen Met Sites.

(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:

<u>SITE</u>	<u>TIME</u>	<u>ALTITUDE</u>
LC-33	0920 MDT	2760 meters
LC-33	0926 MDT	2760 meters
Jallen	0840 MDT	2700 meters
Jallen	0925 MDT	2400 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

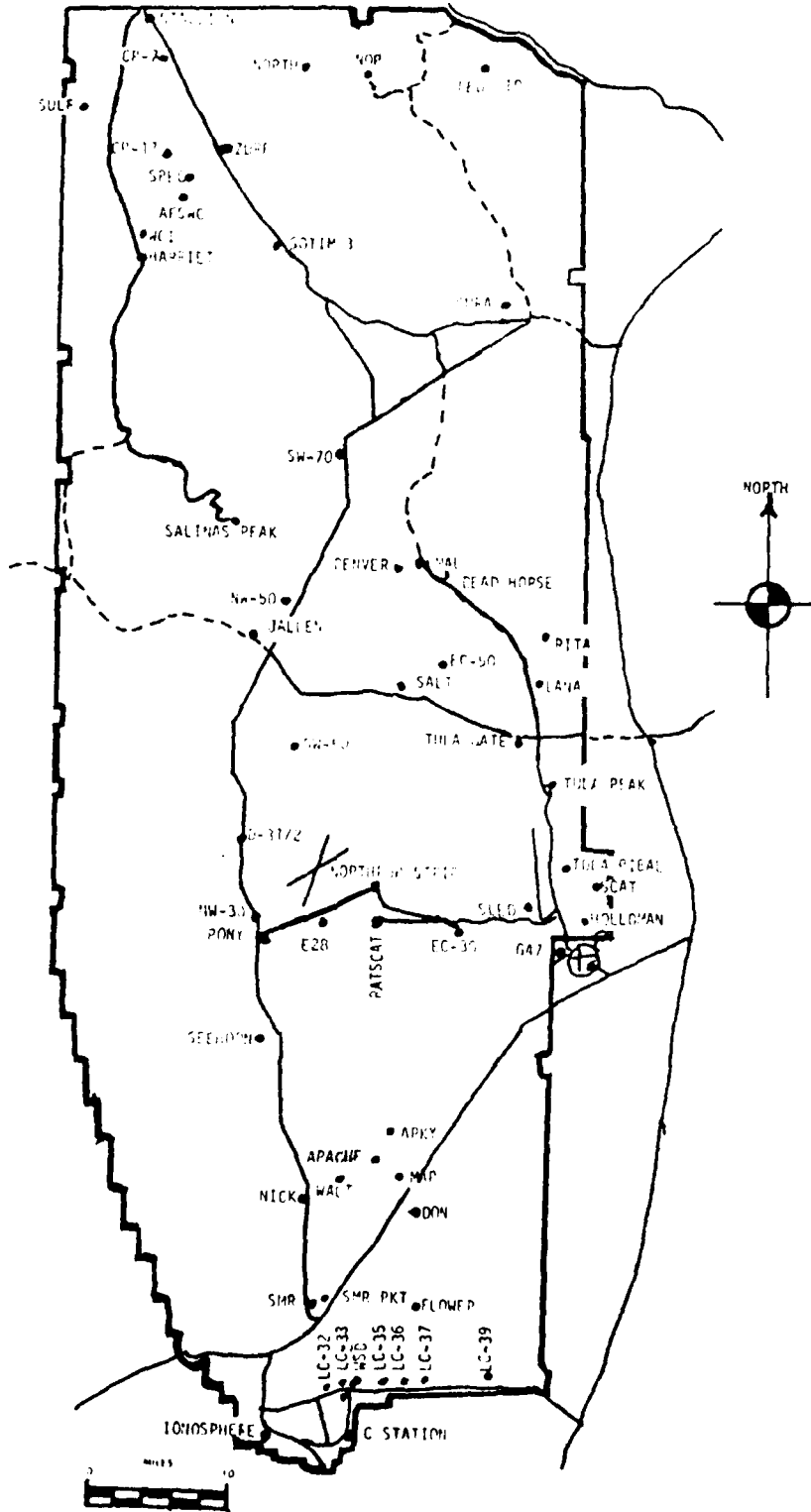
Holloman	0630 MDT
Jallen	0630 MDT
LC-37	0800 MDT
WSD	0926 MDT
Holloman	0925 MDT
Jallen	0925 MDT

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NTIS CARD	<input checked="" type="checkbox"/>
DTIC FILE	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	<input type="checkbox"/>
Final Report	<input type="checkbox"/>
Dissemination	<input type="checkbox"/>
Availability	<input type="checkbox"/>
Dist	<input type="checkbox"/>

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WSMR METEOROLOGICAL SITES



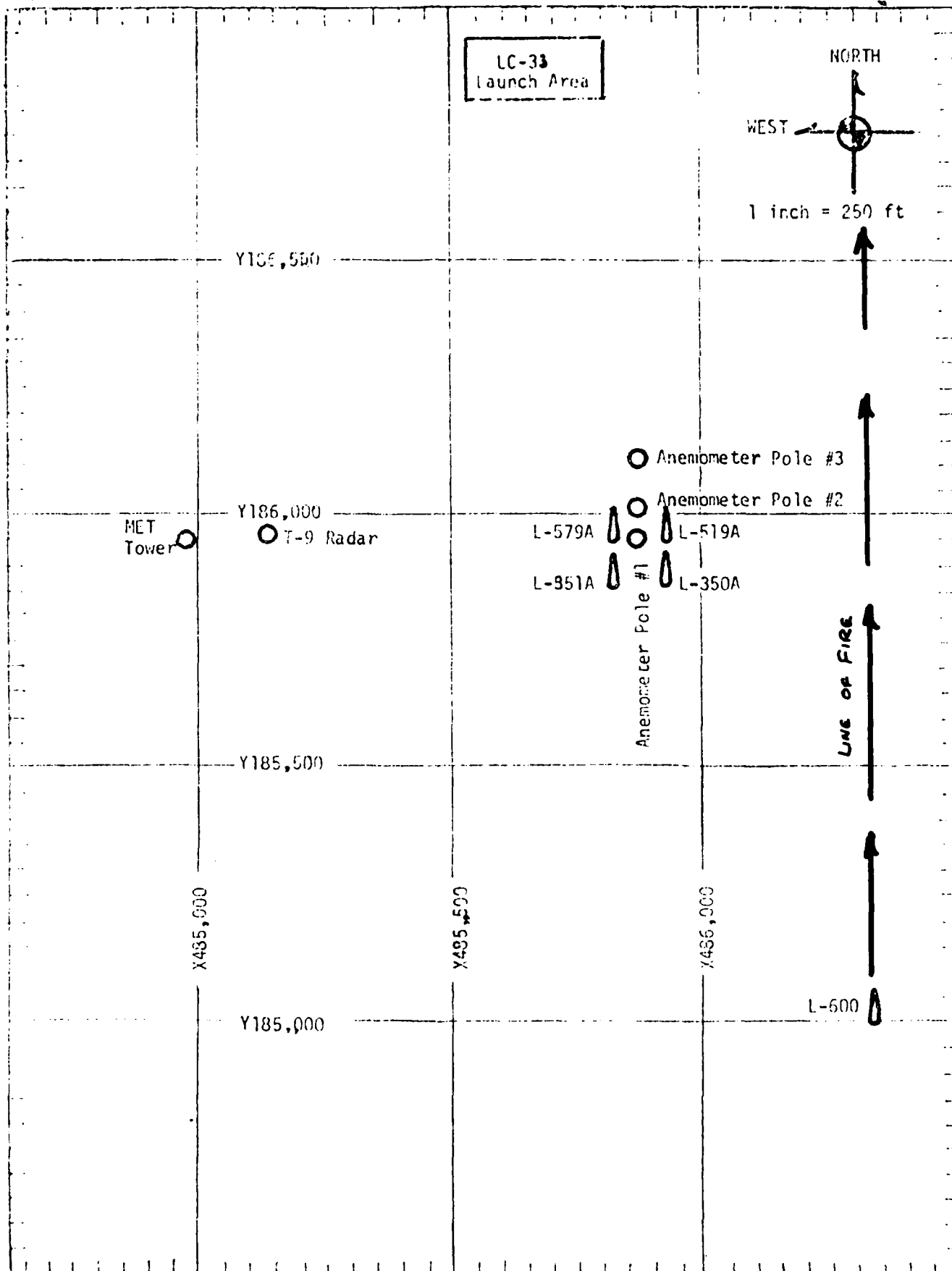


TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.29 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 KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30		CALM	T -30		CALM
T -20		CALM	T -20		CALM	T -20		CALM
T -10		CALM	T -10		CALM	T -10	195	01
T 0.0		CALM	T 0.0		CALM	T 0.0	195	02
T +10		CALM	T +10		CALM	T +10		CALM

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 KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30		CALM
T -20		CALM	T -20		CALM
T -10	276	01	T -10		CALM
T 0.0	276	02	T 0.0		CALM
T +10	257	02	T +10		CALM

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30		CALM	T -30	161	02
T -20		CALM	T -20		CALM
T -10		CALM	T -10	156	04
T 0.0		CALM	T 0.0	156	04
T +10		CALM	T +10	156	02

PILLOT BALLOON MEASURED WIND DATA

TABLE 6

RELEASED FROM LC-33 DATE 08 May 1982 TIME 0926 MDT

COORDINATES (WSTM) X= 486,872.00 Y= 184,146.75 Z= 3981.15

HEIGHTS ARE METERS AGL X OF FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREE	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREE	SPEED KNOTS
Sfc		CALM	1800	221	17			
60	029	02	1860	219	17			
120	MISG	MISG	1920	219	18			
180	145	07	1980	221	17			
240	153	09	2040	217	18			
300	155	12	2100	219	18			
360	MISG	MISG	2160	219	17			
420	183	16	2220	229	17			
480	178	16	2280	222	18			
540	191	15	2340	233	16			
600	183	17	2400	238	17			
660	181	15	2460	237	18			
720	193	15	2520	234	19			
780	180	16	2580	238	18			
840	186	14	2640	236	18			
900	173	15	2700	236	19			
960	197	13	2760	236	19			
1020	192	16						
1080	190	13						
1140	193	12						
1200	193	12						
1260	204	12						
1320	199	15						
1380	203	15						
1440	207	16						
1500	204	15						
1560	214	16						
1620	220	17						
1680	216	19						
1740	226	16						

PILOT BALLOON MEASURED WIND DATA

TABLE 8

RELEASED FROM Jallen DATE 08 May 1982 TIME 0925 MDT
 COORDINATES (WSM) X= 450,491.60 Y= 464,023.05 Z= 4,053.00

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT M	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
Sfc	110	02	1800	216	17			
60	122	02	1860	216	17			
120	122	02	1920	217	19			
180	122	02	1980	218	20			
240	122	03	2040	219	21			
300	122	04	2100	220	22			
360	124	04	2160	221	23			
420	132	04	2220	222	23			
480	140	05	2280	223	23			
540	147	05	2340	224	23			
600	153	05	2400	225	24			
660	158	06						
720	166	06						
780	174	06						
840	182	07						
900	188	07						
960	193	08						
1020	198	09						
1080	203	10						
1140	207	10						
1200	211	11						
1260	214	12						
1320	215	13						
1380	215	13						
1440	216	14						
1500	216	14						
1560	216	14						
1620	216	15						
1680	216	16						
1740	216	16						

TABLE 9

AIMING COMPUTER MET MESSAGES
08 May 1982

Jallen 0630 MDT	Holloman 0630 MDT
METCM1332065	METCM1329061
081250124876	081250124873
00622003 27610876	00142004 27790873
01361011 28630866	01352007 28960863
02633008 28910841	02366010 29070838
03404009 28870802	03392009 28500799
04440010 28320756	04435009 28470753
05466014 28170711	05465014 28230709
06448020 27540669	06461020 27620667
07445021 27080629	07453022 26880626
08446018 26450590	08444025 26880588
09442019 26120553	09438032 26340552
10457024 26120518	10448030 25870517
11432029 25350485	11443032 25270483
12430034 25020438	12429035 25090437
13444033 24100381	13452034 24110380

STATION ALTITUDE 1120.54 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION IS. 133

SIGNIFICANT LEVEL DATA
 120019100
 HOLLOWAY
 TABLE 10

GEODETIC COORDINATES
 32.00005 LAT DEG
 106.09965 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT
873.3	4126.6	4.2	36.0
888.6	4274.0	16.3	30.0
863.9	4426.0	18.5	20.0
850.0	4681.0	17.9	25.0
837.5	5296.6	16.9	25.0
821.0	5832.4	17.1	25.0
760.0	10226.7	5.7	34.0
650.4	12100.3	1.2	38.0
504.1	15877.4	-9.5	49.0
550.4	16591.1	-10.4	36.0
534.2	17255.1	-12.0	26.0
500.0	18300.4	-16.2	24.0
431.6	22096.2	-23.6	23.0
424.4	22000.8	-23.6	22.0
400.0	24316.9	-26.4	22.0
321.9	29557.2	-38.5	20.0
300.0	30942.2	-41.0	
256.0	34930.0	-50.8	
200.0	39612.1	-61.4	
191.7	40477.1	-62.0	
186.4	41046.5	-63.5	
173.8	42400.0	-62.4	
165.2	43490.4	-63.5	
150.0	45454.5	-62.6	
145.6	46050.8	-63.5	
137.4	47235.5	-62.6	
129.4	48465.3	-59.2	
125.0	49048.5	-59.1	
104.7	52811.5	-62.9	
106.0	53748.3	-61.3	
78.8	58583.5	-65.1	
70.0	61001.3	-58.9	
62.0	63231.5	-62.5	
55.5	65650.1	-60.7	
54.0	66330.7	-56.5	
50.0	67940.0	-56.0	
47.2	69163.2	-53.8	
42.6	71351.3	-55.6	
37.6	73794.7	-52.5	
30.0	76810.6	-52.0	

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 82
 ASCENSION IS. 133

SIGNIFICANT LEVEL DATA
 1280010100
 10010MA1
 TABLE 10 Cont'd

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 82
 ASCENSION IS. 133

GEOMETRIC ALTITUDE PRESSURE GEOMETRIC ALTITUDE
 METERS MSL FEET MILLIBARS MSL FEET

TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE
 RELATIVE HUMIDITY PERCENT

27.2	80926.9	-48.4	
20.0	87679.6	-44.6	
13.8	95927.5	-43.1	
10.0	103178.9	-39.3	
9.2	105069.9	-39.9	

STATION ALTITUDE 4125.59 FEET MSL
 8 MAY 82 0630 MDT
 ASCENSION 140. 133

UPPER AIR DATA
 LEGIONAUS
 HOLLOWMAN
 TABLE II

GEOMETRIC ALTITUDE MSL FEET
 PRESSURE MILLIBARS
 AIR TEMPERATURE DEGREES
 DUMPOINT CENTIGRADE
 REL. HUM. PERCENT
 WIND DIRECTION DEGREES
 WIND SPEED KNOTS
 VISIBILITY METERS
 WIND SPEED M/S
 DEW POINT METERS
 REFRACTION INDEX

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES DUMPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DIRECTION DEGREES	WIND SPEED KNOTS	VISIBILITY METERS	WIND SPEED M/S	DEW POINT METERS	REFRACTION INDEX
4125.0	875.3	4.2	36.0	-9.5	090.0	1095.5	649.2	4.1	1.000259
4500.0	861.6	18.4	27.5	-7	129.2	1020.9	600.1	2.2	1.000255
5000.0	840.4	17.6	25.0	-2.6	197.4	1011.0	665.0	4.5	1.000248
5500.0	831.4	17.0	25.0	-3.2	211.6	990.1	664.5	8.5	1.000244
6000.0	816.6	16.7	25.3	-3.2	210.2	979.4	664.0	10.7	1.000240
6500.0	801.9	15.4	26.4	-3.8	210.5	966.1	662.5	9.6	1.000236
7000.0	787.4	14.1	27.4	-4.4	223.4	953.0	660.9	6.7	1.000233
7500.0	773.2	12.3	28.4	-5.1	231.9	940.1	659.4	8.2	1.000229
8000.0	759.2	11.5	29.4	-5.7	241.0	927.4	657.9	6.7	1.000225
8500.0	745.5	10.2	30.5	-6.4	243.9	914.5	656.4	9.8	1.000222
9000.0	732.0	8.9	31.5	-7.1	253.5	902.5	654.9	11.2	1.000218
9500.0	718.8	7.6	32.5	-7.8	259.4	890.4	653.5	12.7	1.000215
10000.0	705.8	6.3	33.5	-8.0	261.1	876.4	651.8	14.4	1.000211
10500.0	692.9	5.1	34.6	-9.3	261.9	860.1	650.4	16.2	1.000208
11000.0	680.0	3.9	35.6	-9.9	260.5	853.6	649.0	18.0	1.000204
11500.0	667.4	2.8	36.6	-10.6	259.2	841.5	647.6	19.6	1.000201
12000.0	655.0	1.6	37.6	-11.3	257.7	827.1	646.3	20.7	1.000198
12500.0	642.6	.3	38.9	-12.0	256.5	817.5	644.7	21.3	1.000194
13000.0	630.3	-1.2	40.4	-12.9	255.4	805.2	642.9	21.6	1.000191
13500.0	618.3	-2.6	41.9	-13.7	254.1	793.1	641.2	22.0	1.000188
14000.0	606.5	-4.1	43.4	-14.6	252.0	784.2	639.5	22.6	1.000185
14500.0	594.9	-5.5	44.9	-15.6	251.1	773.4	637.7	24.0	1.000182
15000.0	583.5	-7.0	46.4	-16.3	249.4	762.0	636.0	25.7	1.000179
15500.0	572.4	-8.4	47.9	-17.5	247.4	752.4	634.2	26.6	1.000176
16000.0	561.4	-9.7	48.4	-19.0	245.9	741.6	632.6	31.5	1.000173
16500.0	550.4	-10.4	50.0	-22.5	245.7	729.5	631.7	32.5	1.000168
17000.0	539.6	-11.5	29.4	-25.7	247.7	716.0	630.4	33.3	1.000164
17500.0	529.0	-12.6	23.7	-28.2	240.0	707.0	628.9	32.1	1.000161
18000.0	518.5	-13.9	25.1	-29.6	232.0	696.4	627.4	31.2	1.000158
18500.0	508.2	-15.2	24.5	-30.9	232.0	686.0	625.8	31.5	1.000155
19000.0	498.1	-16.4	24.0	-32.2	231.7	675.6	624.5	31.2	1.000153
19500.0	488.0	-17.4	23.8	-33.1	230.1	664.6	623.1	31.0	1.000150
20000.0	478.1	-18.5	23.7	-34.1	217.9	653.7	621.6	30.9	1.000148
20500.0	468.4	-19.5	23.6	-35.0	214.5	642.1	620.6	31.2	1.000145
21000.0	458.9	-20.5	23.4	-36.0	214.4	632.0	619.5	31.1	1.000143
21500.0	449.6	-21.5	23.3	-36.9	213.7	622.4	618.0	33.6	1.000140
22000.0	440.5	-22.6	23.1	-37.9	210.7	612.2	616.7	35.3	1.000138
22500.0	431.5	-23.6	23.0	-38.8	209.0	602.2	615.5	36.0	1.000135
23000.0	422.6	-24.6	22.0	-39.4	202.0	590.6	613.2	37.0	1.000133
23500.0	413.9	-24.8	22.0	-40.3	202.0	580.5	614.0	36.8	1.000130

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION NO. 133

UPPER AIR DATA
 1280010133
 HOLLOWMAN
 TABLE 11 Cont'd

WULVIC COORDINATES
 32.00805 LAT DEG
 106.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
4000.0	400.3	-25.8	-41.1	22.0	570.7	612.8	249.2	35.3	1.000128
4050.0	390.9	-25.8	-42.0	22.1	561.2	611.5	252.0	34.1	1.000126
4100.0	380.4	-26.0	-42.8	22.5	551.9	610.0	250.1	33.4	1.000124
4150.0	370.1	-26.2	-43.7	22.9	542.0	608.5	257.5	32.9	1.000122
4200.0	360.0	-30.4	-44.6	23.3	533.9	607.0	257.9	32.4	1.000120
4250.0	354.1	-31.6	-45.5	23.7	525.1	605.5	255.2	31.9	1.000118
4300.0	350.3	-32.8	-46.4	24.1	516.5	603.9	252.6	31.6	1.000116
4350.0	346.7	-34.0	-47.3	24.5	508.0	602.4	251.0	32.4	1.000114
4400.0	341.3	-35.2	-48.2	24.9	499.7	600.9	251.7	33.1	1.000112
4450.0	334.0	-36.4	-49.1	25.3	491.5	599.4	253.1	33.7	1.000110
4500.0	326.9	-37.6	-50.0	25.7	483.5	597.9	253.9	33.4	1.000108
4550.0	319.9	-36.7	-51.7	25.7**	475.5	596.5	253.9	31.8	1.000106
4600.0	312.8	-39.5	-55.9	15.5**	465.4	595.5	253.9	30.6	1.000104
4650.0	305.0	-40.3	-62.4	7.3**	457.7	594.5	253.6	30.2	1.000102
4700.0	299.2	-41.1			449.5	593.4	253.7	30.3	1.000100
4750.0	292.5	-42.4			441.5	591.8	253.0	31.2	1.000098
4800.0	285.9	-43.6			433.6	590.3	254.0	31.6	1.000097
4850.0	279.4	-44.8			425.3	588.7	254.3	31.7	1.000095
4900.0	273.1	-46.0			419.0	587.1	254.4	32.1	1.000093
4950.0	267.3	-47.3			411.7	585.5	254.5	32.5	1.000092
5000.0	260.9	-48.5			404.6	583.9	254.2	33.0	1.000090
5050.0	255.1	-49.7			397.7	582.3	257.5	33.5	1.000089
5100.0	249.3	-50.9			390.6	580.7	258.0	34.2	1.000087
5150.0	243.4	-52.1			383.5	579.3	255.3	35.5	1.000085
5200.0	237.0	-53.2			376.4	577.8	253.3	37.6	1.000084
5250.0	232.0	-54.3			369.4	576.3	251.4	38.1	1.000082
5300.0	226.6	-55.5			362.6	574.8	249.4	37.7	1.000081
5350.0	221.2	-56.6			355.9	573.3	247.7	36.4	1.000079
5400.0	215.0	-57.7			349.3	571.8	246.1	34.8	1.000078
5450.0	210.9	-58.9			342.9	570.3	246.7	33.8	1.000076
5500.0	203.9	-60.0			336.6	568.8	247.6	32.9	1.000075
5550.0	201.1	-61.1			330.4	567.2	246.4	34.1	1.000074
4000.0	195.2	-61.7			323.2	565.5	246.9	35.8	1.000072
4050.0	191.5	-62.1			316.0	564.0	249.0	40.5	1.000070
4100.0	186.8	-63.4			310.3	562.2	249.1	45.7	1.000069
4150.0	182.3	-63.1			302.4	560.6	249.3	50.3	1.000067
4200.0	177.4	-62.8			294.5	559.1	249.5	54.7	1.000066
4250.0	173.5	-62.4			286.9	557.5	249.7	58.1	1.000064
4300.0	169.5	-63.0			280.0	556.0	249.0	60.5	1.000062
4350.0	165.2	-63.5			274.3	554.1	249.3	61.5	1.000061

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

GEODETIC COORDINATES
 32.0580°S LAT UEG
 106.0990°S LONG UEG

WIND PER AIR DATA
 128000100
 100000000
 TABLE II Cont'd

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 82
 ASCENSION NO. 133
 0630 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS	WIND DIRECTION DEGREES (W)	WIND SPEED KNOTS	INDEX OF REFRACTION
44000.0	161.1	-63.3		267.5	504.4	299.7	60.6	1.000000
43500.0	157.2	-63.0		260.7	504.7	299.7	59.6	1.000058
43000.0	153.4	-62.8		254.1	505.0	299.0	58.3	1.000057
42500.0	149.7	-62.7		247.7	505.2	299.0	57.7	1.000055
42000.0	146.0	-63.2		242.3	504.4	299.1	57.9	1.000054
41500.0	142.5	-63.0		236.2	504.7	299.4	58.0	1.000053
41000.0	139.0	-62.7		230.1	505.1	299.9	58.1	1.000051
40500.0	135.6	-61.9		225.0	505.3	299.9	57.5	1.000050
40000.0	132.4	-60.5		218.0	508.1	299.3	56.1	1.000048
39500.0	129.2	-59.2		210.3	509.0	299.9	54.2	1.000047
39000.0	126.1	-59.1		205.2	570.0	299.4	51.6	1.000046
38500.0	123.1	-59.6		200.7	509.4	299.5	49.2	1.000045
38000.0	120.1	-60.1		196.3	508.7	299.0	46.9	1.000044
37500.0	117.2	-60.6		192.1	508.0	299.2	45.1	1.000043
37000.0	114.4	-61.1		187.9	507.3	299.2	43.6	1.000042
36500.0	111.6	-61.6		183.8	508.7	299.3	42.7	1.000041
36000.0	108.9	-62.1		179.0	508.0	299.3	42.3	1.000040
35500.0	106.3	-62.6		174.9	505.3	299.9	40.9	1.000039
35000.0	103.7	-62.6		171.0	505.3	299.5	39.4	1.000038
34500.0	101.2	-61.7		166.8	508.5	299.4	35.5	1.000037
34000.0	98.8	-61.5		162.0	508.8	299.9	31.1	1.000036
33500.0	96.4	-61.9		158.9	508.2	299.5	27.1	1.000035
33000.0	94.0	-62.3		155.3	505.7	299.1	25.0	1.000033
32500.0	91.7	-62.7		151.0	505.2	299.7	23.0	1.000034
32000.0	89.5	-63.1		148.4	504.7	299.3	21.8	1.000033
31500.0	87.3	-63.5		145.1	504.1	299.2	20.7	1.000032
31000.0	85.2	-63.9		141.0	503.0	299.3	20.2	1.000032
30500.0	83.1	-64.2		136.0	503.1	299.7	20.0	1.000031
30000.0	81.1	-64.6		133.3	502.5	299.9	20.9	1.000030
29500.0	79.1	-65.0		132.4	502.0	299.0	23.2	1.000029
29000.0	77.2	-64.0		128.0	503.4	299.0	24.5	1.000029
28500.0	75.3	-62.7		124.7	505.1	299.3	20.4	1.000028
28000.0	73.5	-61.5		121.0	508.8	299.7	16.8	1.000027
27500.0	71.7	-60.2		117.4	508.5	299.3	15.0	1.000026
27000.0	70.0	-58.9		113.8	570.2	299.1	17.5	1.000025
26500.0	68.3	-59.7		111.5	569.2	299.4	16.5	1.000025
26000.0	66.7	-60.5		109.2	503.1	299.9	19.2	1.000024
25500.0	65.1	-61.3		107.0	567.0	299.4	17.8	1.000024
25000.0	63.5	-62.1		104.6	505.4	299.0	15.9	1.000023
24500.0	62.0	-62.3		102.4	505.7	299.0	15.4	1.000023

GEODETIC COORDINATES
 32.00805 LAT DEG
 106.09905 LONG DEG

UPPER AIR DATA
 128001133
 HOLLUMAI
 TABLE 11 Cont'd

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62
 ASCENSION NO. 133 0630 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION (DEGREES TRUE)	WIND SPEED (KNOTS)	INDEX OF REFRACTION
04000.0	60.5	-61.9		99.0	500.2	251.7	16.6	1.000072
04500.0	59.0	-61.6		97.2	506.7	249.2	17.6	1.000022
05000.0	57.6	-61.2		94.7	507.2	242.5	17.0	1.000021
05500.0	56.2	-60.8		92.2	507.7	243.4	15.9	1.000021
06000.0	54.9	-58.5		89.1	510.7	232.7	11.3	1.000020
06500.0	53.6	-56.4		86.1	513.5	209.0	7.6	1.000019
07000.0	52.3	-56.3		84.0	513.7	190.5	8.2	1.000019
07500.0	51.1	-50.1		82.0	513.9	177.7	9.8	1.000018
08000.0	49.9	-55.9		80.0	514.2	175.2	10.8	1.000018
08500.0	48.7	-55.0		77.0	513.4	177.2	11.2	1.000017
09000.0	47.6	-54.1		75.0	510.0	170.2	11.5	1.000017
09500.0	46.5	-54.1		73.9	510.0	160.5	6.9	1.000016
10000.0	45.4	-54.5		72.5	510.1	152.7	7.6	1.000016
10500.0	44.3	-54.9		70.7	515.5	115.4	7.2	1.000016
11000.0	43.3	-55.3		69.2	515.0	110.9	5.9	1.000015
11500.0	42.3	-55.4		67.0	514.9	104.0	4.7	1.000015
12000.0	41.3	-54.0		65.9	515.0	113.5	2.1	1.000015
12500.0	40.3	-54.2		64.2	510.4	204.5	1.2	1.000014
13000.0	39.4	-53.6		62.5	517.2	202.5	2.8	1.000014
13500.0	38.5	-53.1		60.9	510.0	212.0	2.8	1.000014
14000.0	37.6	-52.5		59.5	510.7	205.2	2.8	1.000013
14500.0	36.7	-52.4		57.9	510.0	274.0	4.2	1.000013
15000.0	35.8	-52.4		50.0	510.0	200.0	6.1	1.000013
15500.0	35.0	-52.3		55.5	510.9	205.1	8.0	1.000012
16000.0	34.2	-52.3		54.0	519.0	204.5	7.1	1.000012
16500.0	33.4	-52.2		52.7	519.0	200.4	6.0	1.000012
17000.0	32.6	-52.2		51.5	519.1	200.5	5.2	1.000011
17500.0	31.9	-52.1		50.5	519.2	205.1	7.2	1.000011
18000.0	31.2	-52.1		49.1	519.2	200.1	9.2	1.000011
18500.0	30.4	-52.0		48.0	519.5	209.9	10.2	1.000011
19000.0	29.7	-51.7		45.8	519.0	207.0	8.1	1.000010
19500.0	29.1	-50.8		45.5	510.9	210.9	6.2	1.000010
20000.0	28.4	-50.0		44.5	502.0	203.9	5.6	1.000010
20500.0	27.7	-49.1		43.1	503.1	202.0	6.5	1.000010
21000.0	27.1	-48.4		42.0	504.1	205.1	7.4	1.000009
21500.0	26.5	-48.1		41.0	504.4	202.4	7.9	1.000009
22000.0	25.9	-47.8		40.0	504.0	201.0	10.5	1.000009
22500.0	25.3	-47.6		39.1	505.1	211.5	15.1	1.000009
23000.0	24.7	-47.5		38.2	505.5	207.0	17.7	1.000008
23500.0	24.2	-47.0		37.5	505.8	202.0	18.0	1.000008

STATION ALTITUDE 4126.59 FLT FMSL
 A MAY 62 0630 MDT
 ASCENSION NO. 133

UPPER AIR DATA
 1200010133
 HOLLOWAY

TABLE 11 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/M ³ CURIC METER	SPEED OF SOUND KIPTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KIPTS	INDEX OF REFRACTION
04000.0	23.6	-40.8		30.4	580.2	0.0	19.6	1.000008
04500.0	23.1	-40.5		30.5	580.5	7.4	15.1	1.000008
05000.0	22.8	-40.2		34.7	580.9	315.9	13.2	1.000008
05500.0	22.1	-40.0		33.9	581.2	204.0	21.2	1.000008
06000.0	21.6	-40.7		33.1	581.5	270.4	20.5	1.000007
06500.0	21.1	-40.4		32.3	581.9	200.5	31.6	1.000007
07000.0	20.6	-40.2		31.5	580.2	275.4	34.9	1.000007
07500.0	20.2	-40.9		30.8	580.6	201.2	30.4	1.000007
08000.0	19.7	-40.7		30.1	580.8	260.0	34.9	1.000007
08500.0	19.3	-40.6		29.4	580.9	253.7	33.3	1.000007
09000.0	18.8	-40.5		28.7	589.1	250.0	31.1	1.000006
09500.0	18.4	-40.4		28.1	589.2	200.4	26.5	1.000006
10000.0	18.0	-40.3		27.4	589.3	203.9	22.0	1.000006
10500.0	17.6	-40.2		26.8	589.5	203.0	17.9	1.000006
11000.0	17.2	-40.1		26.2	589.6	273.2	16.8	1.000006
11500.0	16.8	-40.0		25.5	589.7	270.2	16.2	1.000006
12000.0	16.5	-40.9		25.0	589.8	301.5	16.3	1.000006
12500.0	16.1	-40.8		24.5	590.0	209.7	17.7	1.000005
13000.0	15.7	-40.7		23.9	590.1	237.7	19.2	1.000005
13500.0	15.4	-40.6		23.4	590.2	290.0	20.7	1.000005
14000.0	15.0	-40.5		22.8	590.4	272.7	21.5	1.000005
14500.0	14.7	-40.4		22.3	590.5	293.5	22.3	1.000005
15000.0	14.4	-40.3		21.8	590.6	280.1	23.2	1.000005
15500.0	14.1	-40.2		21.3	590.8	202.2	23.2	1.000005
16000.0	13.8	-40.1		20.8	590.9	277.6	23.0	1.000005
16500.0	13.5	-40.0		20.3	591.3	279.4	22.8	1.000005
17000.0	13.2	-40.5		19.9	591.6	271.0	22.2	1.000004
17500.0	12.9	-40.3		19.4	591.9	275.5	21.1	1.000004
18000.0	12.6	-40.2		19.0	592.3	203.9	19.9	1.000004
18500.0	12.3	-40.8		18.5	592.6	270.4	18.9	1.000004
19000.0	12.0	-40.5		18.1	593.0	273.3	18.1	1.000004
19500.0	11.7	-40.4		17.7	593.3	270.5	17.4	1.000004
10000.0	11.5	-40.0		17.3	593.6	270.4	17.6	1.000004
10500.0	11.3	-40.7		16.9	594.0	274.2	22.4	1.000004
11000.0	11.0	-40.4		16.5	594.3	271.5	27.3	1.000004
11500.0	10.8	-40.2		16.1	594.6	203.0	32.3	1.000004
12000.0	10.5	-39.9		15.7	595.0			1.000004
12500.0	10.3	-39.7		15.4	595.3			1.000003
13000.0	10.1	-39.4		15.0	595.6			1.000003
13500.0	9.9	-39.4		14.7	595.6			1.000003

GEODETIC COORDINATES
 32.00005 LAT DEG
 106.00005 LON DEG

UPLR AIR DATA
 1230010100
 10000000

STATION ALTITUDE 4126.50 FEET MSL
 8 MAY 02 0630 PDT
 ASCENSION NO. 100

TABLE 11 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
104000.0	9.6	-39.6		14.4	395.4			1.000003
104500.0	9.4	-39.7		14.1	395.2			1.000003
105000.0	9.2	-39.9		13.8	395.0			1.000003

STATION ALTITUDE 9120.59 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION IS. 133

WIND REPORT LEVELS
 1300010105
 06000001

GEODETIC COORDINATES
 20-000065 LAT DEG
 106-09095 LONG DEG

TABLE 12

MILLIBARS	PRESSURE GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE GEOPOTENTIAL PERCENT	WIND DATA DIRECTION (MAGNETIC TRUE)	SPEED KNOTS
856.0	4578.	17.9	-2.4	189.4	0.0
800.0	6571.	15.2	-3.9	210.9	0.9
750.0	8549.	10.6	-6.2	247.0	3.0
700.0	10217.	5.7	-8.9	261.7	12.2
650.0	12190.	1.2	-11.5	257.2	21.1
600.0	14279.	-4.0	-15.1	251.0	29.5
550.0	16499.	-10.4	-22.7	240.0	36.7
500.0	18881.	-16.2	-32.0	252.0	51.5
450.0	21456.	-21.5	-36.9	230.0	56.7
400.0	24277.	-26.4	-41.0	251.0	58.5
350.0	27596.	-33.8	-47.1	251.9	56.5
300.0	30883.	-41.0		253.7	50.2
250.0	34865.	-50.8		250.7	34.1
200.0	39519.	-61.4		240.0	34.4
175.0	42222.	-62.5		249.0	57.2
150.0	45535.	-62.6		249.9	57.7
125.0	49042.	-59.2		253.5	50.8
100.0	53566.	-61.3		202.0	35.0
89.0	58090.	-64.0		271.1	25.0
70.0	60796.	-58.0		199.4	17.3
60.0	63936.	-61.8		234.9	16.1
50.0	67094.	-56.0		174.0	10.7
40.0	72377.	-54.0		243.4	1.8
30.0	78478.	-52.0		263.4	5.1
25.0	82403.	-47.4		255.0	17.1
20.0	87271.	-44.8		260.9	30.0
15.0	93603.	-43.5		294.0	21.8
10.0	102624.	-39.3			

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

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 82 0630 MDT
 ASCENSION NO. J5

SIGNIFICANT LEVEL DATA
 1280000000
 JALLEN

WODEL TIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMID. PERCENT
876.4	4051.0	3.0	44.0
874.4	4112.5	9.2	42.0
870.4	4238.0	12.5	40.0
850.0	4895.2	16.0	31.0
844.4	5080.0	17.4	31.0
781.8	7225.1	13.8	31.0
700.0	10240.6	5.9	33.0
658.0	11868.1	1.7	36.0
595.8	14465.1	-6.1	44.0
500.0	18904.1	-17.0	50.0
445.4	21731.5	-21.8	27.0
434.7	22319.5	-22.6	26.0
400.0	24310.3	-27.1	27.0
350.3	28746.3	-38.5	31.0

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION NO. 35

UPPER AIR DATA
 1200500Z
 JALLEN
 TABLE 14

GEOMETRIC COORDINATES
 054107Z LAT 46
 10049511 LONG 160

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	HEIGHT GEOMETRIC METER	HEIGHT GEOMETRIC KILOMETERS	DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	876.4	3.0	-8.0	44.0	110.0	047.9	350.0	2.9	1.000203
4500.0	862.2	13.9	-8	36.4	109.7	060.9	297.7	2.1	1.000259
5000.0	840.8	16.8	-9	31.0	1014.0	064.2	251.7	3.6	1.000235
5500.0	831.8	16.7	-9.5	31.0	997.0	004.1	250.7	5.9	1.000249
6000.0	817.0	15.9	-1.2	31.0	982.2	005.1	222.1	8.0	1.000244
6500.0	802.4	15.0	-2.0	31.0	967.0	002.2	231.0	9.6	1.000240
7000.0	780.1	14.2	-2.7	31.0	953.5	001.2	234.0	9.8	1.000255
7500.0	774.0	13.1	-3.6	31.2	939.6	039.9	239.7	9.5	1.000251
8000.0	759.9	11.8	-9.6	31.5	927.1	050.5	240.0	10.2	1.000227
8500.0	740.1	10.5	-5.6	31.8	914.0	050.7	234.9	11.2	1.000223
9000.0	732.6	9.2	-6.6	32.2	902.5	059.2	233.9	12.2	1.000219
9500.0	719.3	7.8	-7.6	32.5	890.1	055.0	222.2	13.5	1.000215
10000.0	706.2	6.5	-8.6	32.8	876.1	052.1	239.7	14.5	1.000211
10500.0	693.2	5.2	-9.5	33.5	860.1	050.5	250.0	16.2	1.000207
11000.0	680.4	3.9	-10.3	34.4	854.1	049.0	235.2	18.6	1.000204
11500.0	667.7	2.6	-11.1	35.3	842.2	047.5	231.2	20.0	1.000201
12000.0	655.3	1.3	-12.0	36.4	830.6	045.9	230.4	21.0	1.000197
12500.0	642.9	-2	-12.8	37.9	819.3	044.1	250.5	21.5	1.000194
13000.0	630.7	-1.7	-13.6	39.5	808.5	042.5	250.4	21.5	1.000191
13500.0	618.7	-3.2	-14.5	41.0	797.4	040.5	250.7	21.5	1.000188
14000.0	607.0	-4.7	-15.4	42.5	786.0	038.7	250.6	20.7	1.000185
14500.0	595.4	-6.1	-16.4	44.0	776.0	036.9	250.7	19.1	1.000182
15000.0	583.8	-7.4	-17.9	42.4	764.4	035.4	250.6	17.9	1.000178
15500.0	572.3	-8.6	-19.5	40.8	753.0	033.9	251.4	17.6	1.000175
16000.0	561.1	-9.8	-21.1	39.2	741.7	032.4	251.9	17.9	1.000171
16500.0	550.0	-11.1	-22.7	37.6	730.0	030.9	251.9	19.6	1.000168
17000.0	539.2	-12.3	-24.2	36.0	719.7	029.4	252.2	21.5	1.000165
17500.0	528.6	-13.5	-25.8	34.4	709.0	027.9	252.4	22.8	1.000162
18000.0	518.3	-14.8	-27.5	32.9	698.4	026.4	254.1	24.1	1.000159
18500.0	508.1	-16.0	-29.1	31.3	688.0	024.8	252.1	25.0	1.000156
19000.0	498.0	-17.2	-30.6	29.9	677.5	023.4	250.0	26.1	1.000154
19500.0	488.0	-18.0	-31.5	29.4	668.0	022.4	245.0	28.3	1.000151
20000.0	478.1	-18.9	-32.4	28.8	654.6	021.5	241.0	30.6	1.000148
20500.0	468.4	-19.7	-33.4	28.3	643.7	020.5	240.0	32.6	1.000146
21000.0	458.9	-20.6	-34.3	27.8	632.0	019.2	235.5	33.9	1.000143
21500.0	449.6	-21.4	-35.2	27.2	622.1	018.2	230.5	34.4	1.000140
22000.0	440.5	-22.2	-36.2	26.5	611.2	017.5	230.5	33.7	1.000138
22500.0	431.4	-23.0	-37.1	26.1	600.7	016.2	242.9	32.7	1.000135
23000.0	422.5	-24.1	-38.0	26.3	591.0	014.8	235.5	32.9	1.000133
23500.0	413.8	-25.3	-38.9	26.6	581.4	013.4	247.4	33.2	1.000131

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62 0630 MDT
 ASCENSION NO. 35

UJPLR AIR DATA
 1280030035
 JALLEN

MODEL COORDINATES
 33.10/12 LAT DEG
 106.49511 Lon DEG

TABLE 14 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	INDEX OF REFRACTION	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4000.0	400.2	-20.4	26.8	572.0	612.0	1.000129	240.0	33.5	1.000129
4500.0	390.7	-27.6	27.2	562.7	610.5	1.000126	240.7	33.8	1.000126
5000.0	380.3	-28.9	27.6	553.0	608.9	1.000124	240.0	33.2	1.000124
5500.0	380.0	-30.2	28.1	544.7	607.5	1.000122	250.0	32.6	1.000122
6000.0	371.9	-31.4	28.5	535.9	605.7	1.000120	250.7	32.2	1.000120
6500.0	363.9	-32.7	29.0	527.3	604.1	1.000118	250.4	31.9	1.000118
7000.0	350.2	-34.0	29.4	518.0	602.5	1.000116	249.2	33.3	1.000116
7500.0	340.6	-35.3	29.9	510.5	600.9	1.000114			1.000114
8000.0	341.1	-36.6	30.3	502.3	599.2	1.000112			1.000112
8500.0	333.8	-37.9	30.8	494.2	597.0	1.000111			1.000111

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 52
 ASCENSION NO. 35

MANDATORY LEVELS
 1200030000
 JALLN
 TABLE 15

GEODETIC COORDINATES
 53.16712 LAT DEG
 106.49511 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRAD		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4892.	16.0	-1.1	31.	257.0	3.1
800.0	6592.	14.9	-2.1	31.	231.2	9.9
750.0	8361.	10.8	-5.3	32.	253.2	10.9
700.0	10231.	5.9	-9.1	33.	250.7	15.1
650.0	12203.	.7	-12.3	37.	250.4	21.1
600.0	14288.	-5.6	-16.0	43.	250.0	17.7
550.0	16504.	-11.1	-22.7	36.	251.9	17.8
500.0	18879.	-17.0	-30.4	30.	250.7	23.8
450.0	21451.	-21.4	-35.2	27.	238.0	34.4
400.0	24272.	-27.1	-40.3	27.	240.4	33.7
350.0	27378.	-35.1	-46.5	30.	240.3	34.6

STATION ALTITUDE 4051.37 FEET MSL
 8 MAY 62 0800 MDT
 ASCENSION NO. 44

SIGNIFICANT LEVEL DATA
 1280160044
 LC-37

GEODETIC COORDINATES
 32-40175 LAT DEG
 106-31252 LONG DEG

TABLE 16

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUMID. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
877.5	4051.4	9.8	7.4	45.0
866.6	4414.7	14.8	-6.1	23.0
850.0	4935.3	18.4	-5.6	19.0
816.0	6268.2	17.8	-6.8	18.0
700.0	10306.5	7.3	-13.0	22.0
548.0	16714.4	-10.4	-19.0	49.0
515.4	18257.6	-13.7	-22.2	19.0
500.0	19013.5	-15.3	-24.2	16.0
460.0	24437.7	-26.5	-42.1	19.0
362.0	26766.4	-31.6	-47.4	19.0
342.2	28069.0	-34.3	-49.7	19.0
323.2	29395.1	-37.7	-52.2	20.0
300.0	31074.8	-40.9		
250.0	35030.8	-49.8		
215.2	38258.9	-57.0		
200.0	39781.6	-58.5		
173.2	42736.9	-62.2		
150.0	45670.9	-61.5		
136.4	47608.6	-62.6		
129.0	48751.7	-59.4		
100.0	54022.1	-60.1		
82.0	58102.6	-58.7		
70.0	61352.3	-62.8		
50.0	68323.4	-55.2		
37.0	74736.3	-51.1		
33.6	76806.8	-51.6		
30.0	79245.0	-50.5		
21.7	86326.3	-44.6		
20.0	88133.2	-44.8		
13.2	97913.9	-41.0		
10.6	102304.9	-38.4		

STATION ALTITUDE 4051.57 FEET MSL
 8 MAY 62
 ASCENSION NO. 44 0800 MDT

Upper AIR DATA
 129100044
 1C-37

GEODETIC COORDINATES
 22.40175 LAT DEG
 106.51252 LONG DEG

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KINOTS	ANGLE OF DIRECTION DEGREES (TH)	WIND SPEED KINOTS	INDEX OF REFRACTION
4051.4	877.5	9.8	7.4	85.0	1075.0	650.8	0.0	5.0	1.000280
4500.0	803.4	15.4	-6.0	22.5	1040.0	602.5	201.2	5.1	1.000250
5000.0	840.0	18.4	-5.7	19.0	1011.0	602.5	201.2	6.5	1.000245
5500.0	855.1	18.1	-6.1	18.6	994.5	605.5	201.2	9.9	1.000239
6000.0	818.4	17.9	-6.5	18.2	977.7	605.2	201.8	12.7	1.000235
6500.0	805.8	17.2	-7.1	18.2	962.0	604.4	205.4	12.8	1.000231
7000.0	759.3	15.9	-7.8	18.7	949.0	602.9	207.1	13.1	1.000227
7500.0	775.1	14.6	-8.0	19.2	930.0	611.4	212.5	14.0	1.000225
8000.0	761.2	13.3	-9.5	19.7	924.2	619.9	210.6	14.5	1.000220
8500.0	747.5	12.0	-10.1	20.2	911.0	620.4	220.7	14.7	1.000216
9000.0	734.0	10.7	-10.9	20.7	899.0	620.0	220.7	15.0	1.000215
9500.0	720.6	9.4	-11.7	21.2	887.5	620.5	219.5	15.2	1.000210
10000.0	707.8	8.1	-12.5	21.7	875.7	620.8	220.2	15.4	1.000206
10500.0	694.0	6.8	-13.0	22.8	865.7	622.2	221.5	15.7	1.000205
11000.0	681.7	5.4	-13.1	24.9	851.0	620.0	224.2	16.4	1.000201
11500.0	668.6	4.0	-13.5	27.0	839.0	619.0	227.0	17.1	1.000198
12000.0	655.1	2.6	-13.5	29.1	827.0	617.5	230.4	17.5	1.000195
12500.0	645.7	1.2	-13.9	31.2	815.5	615.7	233.5	17.9	1.000192
13000.0	631.6	-0.1	-14.3	33.3	804.9	614.1	230.0	18.5	1.000190
13500.0	619.6	-1.5	-14.8	35.5	795.7	612.4	230.0	18.5	1.000187
14000.0	607.9	-2.9	-15.3	37.6	782.7	610.0	230.4	18.4	1.000184
14500.0	596.4	-4.3	-15.9	39.7	771.9	609.2	234.4	20.2	1.000181
15000.0	585.1	-5.7	-16.6	41.8	761.2	607.5	232.0	22.1	1.000178
15500.0	574.0	-7.0	-17.2	43.9	750.7	605.8	231.5	23.9	1.000176
16000.0	563.2	-8.4	-17.9	46.0	740.4	604.2	231.1	25.7	1.000175
16500.0	552.5	-9.8	-18.7	48.1	730.2	602.5	231.4	26.9	1.000170
17000.0	541.8	-11.0	-21.0	45.4	719.5	601.0	230.2	27.5	1.000167
17500.0	531.2	-12.1	-24.8	53.7	708.5	609.0	244.2	28.6	1.000162
18000.0	520.7	-13.1	-29.4	49.0	697.4	620.5	247.5	29.8	1.000158
18500.0	510.4	-14.2	-32.9	18.7	686.5	627.0	255.5	24.9	1.000155
19000.0	500.5	-15.3	-34.1	18.0	675.6	625.7	255.5	26.5	1.000152
19500.0	490.1	-16.3	-35.0	18.1	664.6	624.4	251.0	29.0	1.000150
20000.0	480.1	-17.3	-35.8	18.2	653.7	623.2	251.5	29.9	1.000147
20500.0	470.3	-18.4	-36.6	18.3	643.0	621.9	252.7	30.1	1.000145
21000.0	460.8	-19.4	-37.4	18.4	632.4	620.0	254.7	29.2	1.000142
21500.0	451.4	-20.4	-38.2	18.5	622.1	619.4	254.2	28.6	1.000140
22000.0	442.2	-21.5	-39.1	18.6	612.0	618.1	252.0	28.2	1.000138
22500.0	433.2	-22.5	-39.9	18.6	602.0	616.6	251.1	24.2	1.000135
23000.0	424.4	-23.5	-40.7	18.7	592.2	615.0	250.1	30.4	1.000133
23500.0	415.7	-24.6	-41.5	18.8	582.5	614.5	250.0	31.4	1.000131

STATION ALTITUDE 4001.37 FEET MSL
 8 MAY 62 0800 MDT
 ASCENSION NO. 41

UPPER AIR DATA
 1230150044
 LC-37

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE WET-BULB POINT DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	407.3	-25.6	-42.4	18.9	573.0	613.0	251.1	32.3	1.000129
24500.0	390.9	-26.6	-43.2	19.0	563.7	611.7	251.3	32.6	1.000126
25000.0	390.6	-27.7	-44.1	19.0	554.3	610.4	251.5	33.0	1.000124
25500.0	382.3	-28.8	-45.1	19.0	545.1	609.0	251.7	34.1	1.000122
26000.0	374.3	-29.9	-46.0	19.0	536.0	607.6	250.0	35.5	1.000120
26500.0	366.4	-31.0	-46.9	19.0	527.1	606.3	249.1	37.8	1.000118
27000.0	358.7	-32.0	-47.8	19.0	518.2	604.9	248.0	38.9	1.000116
27500.0	351.0	-33.1	-48.7	19.0	509.3	603.5	248.0	39.1	1.000114
28000.0	343.5	-34.1	-49.6	19.0	500.6	602.3	248.1	39.2	1.000112
28500.0	336.1	-35.4	-50.5	19.3	492.4	600.8	248.5	39.3	1.000110
29000.0	328.8	-36.7	-51.5	19.7	484.4	599.1	248.0	39.5	1.000108
29500.0	321.7	-37.9	-52.9	18.8**	476.4	597.3	245.4	39.2	1.000106
30000.0	314.6	-38.9	-56.8	12.8**	467.8	595.3	244.9	37.3	1.000104
30500.0	307.7	-39.8	-62.4	6.8**	459.4	593.1	244.3	35.1	1.000102
31000.0	301.6	-40.8	-77.0	.9**	451.2	590.9	243.0	32.5	1.000101
31500.0	294.3	-41.8			443.2	592.5	244.1	30.2	1.000099
32000.0	287.6	-43.0			435.3	591.1	243.2	28.0	1.000097
32500.0	281.2	-44.1			427.6	589.6	243.1	29.0	1.000095
33000.0	274.8	-45.2			420.0	588.2	243.1	30.2	1.000094
33500.0	268.6	-46.3			412.5	586.8	243.0	31.9	1.000092
34000.0	262.6	-47.4			405.2	585.3	243.0	33.6	1.000090
34500.0	256.7	-48.5			398.1	583.9	247.0	34.2	1.000089
35000.0	250.9	-49.6			391.1	582.5	247.1	34.7	1.000087
35500.0	245.1	-50.7			383.9	581.0	247.9	35.9	1.000086
36000.0	239.4	-51.9			376.9	579.5	247.9	37.3	1.000084
36500.0	233.8	-53.0			370.0	578.0	248.1	38.0	1.000082
37000.0	228.4	-54.1			363.3	576.5	247.3	38.2	1.000081
37500.0	223.0	-55.3			356.6	575.0	243.7	35.6	1.000079
38000.0	217.8	-56.4			350.1	573.5	241.0	34.4	1.000078
38500.0	212.7	-57.2			343.2	572.4	241.5	35.9	1.000076
39000.0	207.7	-57.7			335.8	571.6	243.0	39.1	1.000075
39500.0	202.7	-58.2			328.6	571.1	240.7	44.6	1.000073
40000.0	197.9	-58.8			321.6	570.4	247.9	40.0	1.000072
40500.0	193.1	-59.4			314.6	569.6	240.1	49.4	1.000070
41000.0	188.5	-60.0			308.1	568.7	247.1	50.4	1.000069
41500.0	183.9	-60.7			301.6	567.9	250.0	51.3	1.000067
42000.0	179.5	-61.3			295.2	567.1	251.4	51.7	1.000066
42500.0	175.2	-61.9			288.9	566.2	251.0	51.8	1.000064
43000.0	171.0	-62.1			282.3	565.4	251.2	51.0	1.000063
43500.0	166.8	-62.0			275.3	564.6	250.0	49.9	1.000061

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

STATION ALTITUDE 4001.37 FEET MSL
 8 MAY 62 0800 MDT
 ASCENSION IS. 44

UPPER AIR DATA
 1202100044
 LC-17

GEODESIC COORDINATES
 32.40175 LAT DEG
 106.31232 LONG DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS	WIND DIRECTION (DEGREES TRUE)	WIND SPEED (KNOTS)	INDEX OF REFRACTION
44000.0	162.8	-61.9			260.0	360.2	250.2	50.2	1.000010
44500.0	158.9	-61.8			261.0	360.4	249.9	50.9	1.000058
45000.0	155.0	-61.7			252.0	360.6	250.2	51.2	1.000057
45500.0	151.5	-61.5			249.0	360.7	250.0	51.6	1.000055
46000.0	147.6	-61.7			245.2	360.5	251.0	50.7	1.000054
46500.0	144.0	-62.0			237.0	360.1	251.4	49.7	1.000053
47000.0	140.5	-62.3			232.1	363.8	249.0	48.6	1.000052
47500.0	137.1	-62.5			226.0	363.4	247.0	47.5	1.000051
48000.0	133.8	-61.5			220.0	360.8	240.0	48.0	1.000049
48500.0	130.6	-60.1			215.0	360.0	240.0	48.7	1.000048
49000.0	127.5	-59.4			207.8	363.5	247.5	49.8	1.000046
49500.0	124.4	-59.5			202.8	363.4	249.4	50.9	1.000045
50000.0	121.4	-59.6			196.0	363.4	250.0	51.1	1.000044
50500.0	118.5	-59.6			193.0	363.3	252.1	51.3	1.000043
51000.0	115.7	-59.7			186.0	363.2	252.9	50.3	1.000042
51500.0	112.9	-59.8			184.3	363.1	253.7	49.7	1.000041
52000.0	110.2	-59.8			180.0	363.0	251.0	50.3	1.000040
52500.0	107.6	-59.9			175.7	363.9	253.0	50.6	1.000039
53000.0	105.0	-60.0			171.5	363.8	255.0	50.0	1.000038
53500.0	102.5	-60.0			167.5	360.7	250.4	47.4	1.000037
54000.0	100.0	-60.1			163.5	360.0	257.1	42.2	1.000036
54500.0	97.6	-59.9			159.5	363.9	250.2	37.3	1.000036
55000.0	95.3	-59.8			155.0	363.1	260.0	33.1	1.000035
55500.0	93.0	-59.6			151.7	363.3	262.2	29.1	1.000034
56000.0	90.8	-59.4			148.0	363.5	263.1	28.0	1.000033
56500.0	88.6	-59.2			144.3	363.8	264.0	26.9	1.000032
57000.0	86.5	-59.1			140.8	370.0	260.7	23.6	1.000031
57500.0	84.4	-58.9			137.3	370.2	270.0	20.0	1.000031
58000.0	82.4	-58.7			135.9	370.5	270.2	16.2	1.000030
58500.0	80.4	-59.2			131.0	363.8	291.4	12.6	1.000029
59000.0	78.5	-59.8			126.2	363.0	301.0	10.8	1.000029
59500.0	76.6	-60.5			125.5	363.2	300.0	9.8	1.000028
60000.0	74.8	-61.1			122.0	367.3	293.9	7.1	1.000027
60500.0	73.0	-61.7			120.2	360.5	293.0	5.8	1.000027
61000.0	71.2	-62.4			117.7	363.0	281.1	10.6	1.000026
61500.0	69.5	-62.6			115.0	363.2	283.0	17.3	1.000026
62000.0	67.8	-62.1			112.0	360.0	284.0	23.9	1.000025
62500.0	66.2	-61.5			109.0	360.7	281.0	25.9	1.000024
63000.0	64.6	-61.0			106.2	367.4	280.2	28.1	1.000024
63500.0	63.1	-60.5			103.4	360.2	284.0	27.9	1.000023

STATION ALTITUDE 4051.37 FEET MSL
 8 MAY 62
 ASCENSION 140. 44
 0800 MDT

UPPER AIR DATA
 1280100044
 LC-37

TABLE 17 Cont'd

GEODESIC COORDINATES
 32.44175 LAT DEG
 106.31232 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION (DEGREES TRUE)	WIND SPEED (KNOTS)	INDEX OF REFRACTION
04000.0	01.6	-59.9		100.0	560.9	240.4	26.4	1.000002
04500.0	00.1	-59.4		90.0	569.0	230.2	23.7	1.000022
05000.0	06.7	-58.8		93.4	570.3	227.7	18.4	1.0000021
05500.0	57.3	-58.3		92.9	571.1	223.0	13.2	1.0000021
06000.0	53.9	-57.7		90.5	571.0	211.7	11.6	1.0000020
06500.0	54.6	-57.2		86.1	572.3	197.0	10.7	1.0000020
07000.0	53.3	-56.6		85.0	573.2	191.0	11.7	1.0000019
07500.0	52.0	-56.1		83.3	574.0	192.7	13.0	1.0000019
08000.0	50.8	-55.6		81.3	574.7	192.0	15.1	1.0000018
08500.0	49.6	-55.1		79.2	575.3	187.4	14.3	1.0000018
09000.0	48.4	-54.8		77.3	575.7	181.7	13.5	1.0000017
09500.0	47.3	-54.4		75.4	576.1	184.1	9.4	1.0000017
70000.0	40.2	-54.1		73.3	576.0	201.0	4.2	1.0000016
70500.0	43.1	-53.8		71.7	577.0	233.7	2.0	1.0000016
71000.0	44.1	-53.5		69.9	577.4	201.4	1.0	1.0000016
71500.0	43.1	-53.2		60.2	577.8	299.4	1.3	1.0000015
72000.0	42.1	-52.8		60.3	578.2	193.9	1.8	1.0000015
72500.0	41.1	-52.5		64.9	578.7	173.5	4.0	1.0000014
73000.0	40.1	-52.2		63.3	579.1	150.6	2.3	1.0000014
73500.0	39.2	-51.9		61.7	579.5	32.0	1.7	1.0000014
74000.0	38.3	-51.6		60.2	579.4	40.2	2.3	1.0000013
74500.0	37.4	-51.3		50.7	580.3	20.1	2.5	1.0000013
75000.0	36.5	-51.2		57.4	580.4	.4	2.4	1.0000013
75500.0	35.7	-51.3		50.1	580.3	203.7	2.6	1.0000012
76000.0	34.9	-51.4		54.0	580.1	200.7	4.8	1.0000012
76500.0	34.1	-51.5		53.0	580.0	200.4	5.6	1.0000012
77000.0	33.3	-51.5		52.3	580.0	240.0	6.4	1.0000012
77500.0	32.5	-51.3		51.1	580.3	243.1	7.0	1.0000011
78000.0	31.8	-51.1		49.9	580.0	243.1	7.3	1.0000011
78500.0	31.1	-50.8		46.7	580.9	253.0	7.5	1.0000011
79000.0	30.3	-50.6		47.3	581.2	250.0	6.8	1.0000011
79500.0	29.7	-50.3		40.4	581.0	272.3	0.4	1.0000010
80000.0	29.0	-49.9		43.2	582.1	254.3	6.9	1.0000010
80500.0	28.3	-49.5		44.1	582.7	292.0	7.9	1.0000010
81000.0	27.7	-49.0		43.0	583.2	247.9	9.2	1.0000010
81500.0	27.1	-48.6		42.0	583.8	233.9	11.3	1.0000009
82000.0	26.4	-48.2		41.0	584.3	244.3	13.5	1.0000009
82500.0	25.9	-47.8		40.0	584.0	293.7	15.8	1.0000009
83000.0	25.3	-47.4		39.0	583.4	287.3	18.1	1.0000009
83500.0	24.7	-47.0		36.0	583.9	279.1	20.1	1.0000008

STATION ALTITUDE 4051.37 FEET MSL
 8 MAY 52 0800 MDT
 ASCENSION IS. 44

IN PER AIR DATA
 1200100044
 LC-37

GEOMETRIC COORDINATES
 32.49175 LAT DEG
 106.31232 LONG DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (TR)	SPEED KNOTS	INDEX OF REFRACTION
04000.0	24.1	-40.5		37.1	580.5	302.1	20.3	1.0000008
04500.0	23.6	-40.1		36.2	587.0	305.1	20.4	1.0000010
05000.0	23.1	-45.7		35.5	587.5	307.9	19.6	1.0000008
05500.0	22.5	-45.3		34.5	586.1	311.2	17.7	1.0000008
06000.0	22.0	-44.9		33.5	588.0	315.3	15.7	1.0000007
06500.0	21.5	-44.6		32.8	585.9	312.1	13.1	1.0000007
07000.0	21.0	-44.7		32.1	588.9	303.3	10.3	1.0000007
07500.0	20.6	-44.7		31.4	586.0	299.9	8.0	1.0000007
08000.0	20.1	-44.6		30.7	588.7	273.2	7.7	1.0000007
08500.0	19.7	-44.6		30.0	585.9	257.4	8.0	1.0000007
09000.0	19.2	-44.4		29.5	589.2	249.0	8.6	1.0000007
09500.0	18.8	-44.2		28.6	589.4	257.2	9.7	1.0000006
90000.0	18.4	-44.0		28.0	589.7	265.4	10.8	1.0000006
90500.0	18.0	-43.8		27.5	589.9	269.0	12.2	1.0000006
91000.0	17.6	-43.6		26.7	590.2	275.0	13.9	1.0000006
91500.0	17.2	-43.4		26.1	590.5	280.5	15.8	1.0000006
92000.0	16.8	-43.2		25.5	590.7	284.0	16.2	1.0000006
92500.0	16.4	-43.0		24.9	591.0	289.2	16.1	1.0000006
93000.0	16.1	-42.8		24.5	591.5	293.7	16.1	1.0000005
93500.0	15.7	-42.6		23.8	591.5	290.1	15.3	1.0000005
94000.0	15.4	-42.4		23.2	591.6	295.9	14.5	1.0000005
94500.0	15.0	-42.2		22.7	592.1	300.5	14.0	1.0000005
95000.0	14.7	-42.0		22.2	592.5	296.7	14.5	1.0000005
95500.0	14.4	-41.8		21.7	592.0	293.4	15.0	1.0000005
96000.0	14.1	-41.6		21.2	592.6	288.0	16.5	1.0000005
96500.0	13.8	-41.4		20.7	593.1	283.5	19.0	1.0000005
97000.0	13.4	-41.2		20.2	593.4	279.2	21.7	1.0000004
97500.0	13.1	-41.0		19.7	593.0	276.0	23.8	1.0000004
98000.0	12.9	-40.7		19.5	594.0	274.7	25.7	1.0000004
98500.0	12.6	-40.4		18.6	594.5	273.0	27.6	1.0000004
99000.0	12.3	-40.2		18.4	594.0	274.1	26.7	1.0000004
99500.0	12.0	-39.9		18.0	593.0	270.5	29.4	1.0000004
100000.0	11.8	-39.6		17.6	593.5	270.4	30.2	1.0000004
100500.0	11.5	-39.4		17.2	593.0			1.0000004
101000.0	11.5	-39.1		16.8	596.0			1.0000004
101500.0	11.0	-38.9		16.4	596.5			1.0000004
102000.0	10.8	-38.6		16.0	596.0			1.0000004

STATION ALTITUDE 4051.47 FEET MSL
 8 MAY 62
 ASCENSION ISD. 41 0800 MDT

LABORATORY LEVELS
 1280100044
 LC-37

ALTIMETER CORRECTIONS
 32.40175 LAL LEG
 100.51252 LOM LEG

TABLE 18

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEW POINT PERCENT	RELATIVE HUMIDITY PERCENT	WIND DIRECTION DEGREES TRUE	WIND SPEED KNOTS
850.0	4932.	18.4	-5.0	19.	201.2	0.0
800.0	6031.	16.9	-7.3	10.	200.5	14.8
750.0	8410.	12.3	-9.9	20.	220.2	14.7
700.0	10296.	7.3	-13.0	22.	220.0	13.5
650.0	12277.	1.9	-15.7	30.	232.2	17.8
600.0	14373.	-3.8	-15.7	39.	234.0	19.8
550.0	16661.	-10.1	-18.9	49.	235.1	27.2
500.0	18987.	-15.3	-34.2	10.	250.5	20.6
450.0	21571.	-20.6	-38.4	10.	253.9	20.5
400.0	24397.	-26.5	-43.1	19.	251.0	32.5
350.0	27519.	-33.2	-48.8	19.	243.7	37.1
300.0	31013.	-40.9			240.5	32.2
250.0	35004.	-49.8			247.0	34.7
200.0	39680.	-58.5			247.0	47.4
175.0	42419.	-61.0			251.0	51.0
150.0	45548.	-61.5			250.7	51.4
125.0	49261.	-59.5			249.1	50.7
100.0	53630.	-60.1			257.1	42.5
80.0	58420.	-59.3			294.4	12.1
70.0	61142.	-62.8			202.9	14.9
60.0	64284.	-59.3			230.5	23.9
50.0	68000.	-55.2			189.7	14.0
40.0	72773.	-52.2			150.5	2.2
30.0	78906.	-50.5			263.0	0.0
25.0	82830.	-47.2			297.9	10.9
20.0	87710.	-44.8			270.4	7.7
15.0	94068.	-42.2			300.5	14.0

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

STATION ALTITUDE 5989.00 FEET MSL
 8 MAY 62
 ASCENSION NO. 199

SIGNIFICANT LEVEL DATA
 1280020199
 WHITE SANDS
 TABLE 19

GEODETIC COORDINATES
 32.40043 LAT DEG
 108.37033 LONG DEG

PRESSURE MILLIBARS FSL FEET	GEOMETRIC ALTITUDE	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
678.8	5989.0	17.8	29.0
850.0	4923.4	17.5	28.0
940.9	5225.7	18.6	27.0
815.4	6090.8	17.7	27.0
700.0	10293.4	7.2	32.0
627.2	15219.2	-8.8	43.0
568.2	15777.4	-8.5	51.0
560.2	16158.7	-9.3	43.0
544.0	16883.4	-10.3	20.0
500.0	18999.3	-15.2	20.0
443.2	21960.5	-21.4	21.0
400.0	24426.6	-25.9	21.0
358.2	27026.9	-31.6	24.0
325.2	29252.2	-37.1	24.0
300.0	31073.0	-41.0	
293.4	31570.5	-41.5	
250.0	35080.7	-50.1	
214.2	38354.7	-57.1	
200.0	39777.6	-59.3	
184.4	41443.3	-62.0	
150.0	45668.4	-60.4	
144.6	46420.1	-61.3	
113.8	51349.7	-58.9	
100.0	54019.9	-59.9	
61.0	58371.8	-59.1	
70.0	61375.3	-61.6	
50.0	66374.1	-54.7	
30.0	79297.9	-49.9	
22.6	85490.5	-45.2	

STATION ALTITUDE 3989.00 FEET MSL
 8 MAY 62
 ASCENSION NO. 199 0926 MDT

UPPER AIR DATA
 1280020199
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

TABLE 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY (GM/CM ³)	SPEED OF SOUND METERS	WIND VELOCITY (M) KNOTS	WIND DIRECTION (M) DEGREES	INDEX OF REFRACTION
3989.0	878.8	17.4	29.0	1049.5	665.4	.0	.0	1.000260
4000.0	878.5	17.8	29.0	1049.1	665.4	.1	.1	1.000260
4500.0	862.9	17.6	28.5	1031.2	665.2	4.7	4.7	1.000255
5000.0	847.7	17.8	27.5	1012.5	665.3	10.1	9.2	1.000251
5500.0	832.7	18.3	27.0	992.7	665.0	18.1	13.8	1.000247
6000.0	818.0	17.8	27.0	977.0	665.4	18.0	15.5	1.000242
6500.0	803.4	16.7	27.5	963.5	664.0	18.7	13.6	1.000238
7000.0	788.9	15.4	28.1	950.1	662.6	18.9	12.5	1.000234
7500.0	774.7	14.2	28.7	937.2	661.1	19.2	12.3	1.000230
8000.0	760.8	12.9	29.3	924.4	659.6	20.0	13.2	1.000226
8500.0	747.1	11.7	29.9	911.9	658.2	20.5	14.8	1.000222
9000.0	733.7	10.4	30.5	899.5	656.7	21.3	15.8	1.000219
9500.0	720.5	9.2	31.1	887.5	655.7	21.9	16.3	1.000215
10000.0	707.5	7.9	31.7	875.5	653.7	22.1	16.3	1.000211
10500.0	694.6	6.6	32.8	863.5	652.2	22.5	15.9	1.000208
11000.0	681.7	5.3	34.7	851.5	650.6	22.9	16.6	1.000205
11500.0	669.0	3.9	36.5	839.6	649.0	23.1	17.4	1.000202
12000.0	656.6	2.5	38.4	828.3	647.4	23.0	18.2	1.000199
12500.0	644.4	1.2	40.3	817.0	645.7	22.9	18.9	1.000196
13000.0	632.4	-0.2	42.2	805.9	644.1	23.4	19.3	1.000192
13500.0	620.4	-1.6	43.9	794.9	642.4	23.4	19.8	1.000189
14000.0	608.6	-3.1	45.4	783.9	640.7	23.5	20.4	1.000186
14500.0	596.9	-4.6	47.0	773.2	638.9	23.2	21.3	1.000183
15000.0	585.5	-6.0	48.6	762.6	637.1	23.1	22.2	1.000180
15500.0	574.3	-7.5	50.1	752.2	635.3	23.1	21.5	1.000177
16000.0	563.3	-8.9	46.1	741.9	633.6	23.5	20.6	1.000173
16500.0	552.3	-9.8	31.8	730.1	632.4	23.6	20.3	1.000168
17000.0	541.5	-10.6	20.0	718.1	631.4	24.1	20.1	1.000163
17500.0	530.8	-11.7	20.0	707.1	630.0	24.5	21.8	1.000160
18000.0	520.3	-12.9	20.0	696.2	628.6	24.9	23.4	1.000158
18500.0	510.1	-14.0	20.0	685.5	627.2	24.7	24.3	1.000155
19000.0	500.0	-15.2	20.0	675.1	625.8	24.8	25.1	1.000152
19500.0	489.9	-16.2	20.3	664.2	624.5	24.9	25.0	1.000150
20000.0	480.0	-17.3	20.3	653.4	623.2	24.9	24.9	1.000147
20500.0	470.4	-18.3	20.5	642.9	621.9	25.0	24.9	1.000145
21000.0	460.9	-19.4	20.7	632.6	620.7	25.1	24.8	1.000142
21500.0	451.6	-20.4	20.6	622.4	619.4	25.1	25.5	1.000140
22000.0	442.5	-21.5	21.0	612.5	618.1	25.1	26.2	1.000138
22500.0	433.4	-22.4	21.0	601.9	617.0	24.7	27.4	1.000135
23000.0	424.4	-23.3	21.0	591.7	615.8	24.4	28.0	1.000133

STATION ALTITUDE 3989.00 FEET MSL
 8 MAY 62 0926 MDT
 ASCENSION NO. 199

UPPER AIR DATA
 1280020199
 WIND DATA
 TABLE 20 Cont'd

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
43500.0	415.7	-24.2	21.0	581.7	614.7	243.7	30.2	1.000151
44000.0	407.2	-25.1	21.0	571.0	613.0	243.3	31.5	1.000126
44500.0	398.8	-26.1	21.1	562.1	612.4	244.0	32.4	1.000120
45000.0	390.4	-27.2	21.7	552.8	611.1	243.6	33.2	1.000124
45500.0	382.2	-28.3	22.2	543.6	609.7	243.1	34.3	1.000122
46000.0	374.2	-29.3	22.8	534.6	608.5	244.3	35.3	1.000120
46500.0	366.3	-30.4	23.4	525.7	607.0	243.5	36.1	1.000118
47000.0	358.6	-31.5	24.0	517.0	605.0	243.2	36.7	1.000116
47500.0	350.9	-32.8	24.0	508.5	604.0	244.4	36.2	1.000114
48000.0	343.4	-34.0	24.0	500.2	602.5	243.6	35.7	1.000112
48500.0	336.0	-35.2	24.0	492.0	600.9	244.4	35.1	1.000110
49000.0	328.8	-36.5	24.0	483.9	599.4	247.2	34.5	1.000108
49500.0	321.6	-37.6	20.7**	475.7	597.9	243.7	34.5	1.000106
50000.0	314.6	-38.7	14.1**	467.5	596.5	244.0	34.5	1.000104
50500.0	307.7	-39.8	7.6**	459.3	595.2	242.9	34.2	1.000102
51000.0	301.0	-40.8	1.0**	451.3	593.6	242.3	33.5	1.000101
51500.0	294.3	-41.4		442.5	593.0	241.7	32.6	1.000099
52000.0	287.7	-42.6		434.0	591.6	241.2	30.9	1.000097
52500.0	281.2	-43.8		427.1	590.0	240.9	29.2	1.000095
53000.0	274.9	-45.0		419.7	588.4	241.0	29.5	1.000093
53500.0	268.7	-46.2		412.5	586.9	241.2	29.8	1.000092
54000.0	262.6	-47.5		405.4	585.3	242.0	30.3	1.000090
54500.0	256.7	-48.7		398.4	583.7	243.0	31.0	1.000089
55000.0	250.9	-49.9		391.5	582.1	243.7	31.1	1.000087
55500.0	245.1	-51.0		384.3	580.7	244.1	30.2	1.000086
56000.0	239.4	-52.1		377.2	579.3	244.4	29.9	1.000084
57000.0	233.8	-53.1		370.2	577.9	244.1	32.3	1.000082
57500.0	228.6	-54.2		363.3	576.5	243.9	34.7	1.000081
58000.0	223.6	-55.3		356.6	575.0	243.9	37.3	1.000079
58500.0	217.8	-56.3		350.0	573.6	244.0	39.9	1.000078
59000.0	212.7	-57.3		343.2	572.3	244.1	41.1	1.000076
59500.0	207.6	-58.1		336.4	571.3	244.2	41.9	1.000075
60000.0	202.7	-58.9		329.5	570.3	244.4	42.0	1.000073
60500.0	197.8	-59.7		322.6	569.2	244.6	43.9	1.000072
61000.0	193.1	-60.5		315.7	568.1	244.7	45.0	1.000070
61500.0	188.4	-61.3		308.8	567.1	244.7	46.3	1.000069
62000.0	183.9	-62.0		302.4	566.1	244.4	47.9	1.000068
62500.0	179.3	-62.8		295.6	565.4	244.6	49.2	1.000066
63000.0	175.1	-63.6		288.4	565.0	244.5	50.0	1.000064
63500.0	170.9	-64.4		281.2	564.9	244.1	50.8	1.000063

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

STATION ALTITUDE 3989.00 FEET MSL
 8 MAY 32 0926 MDT
 ASCENSION NO. 199

UPPER AIR DATA
 1280020199
 WHITE SANDS

GEODLTIC COORDINATES
 32.40043 LAT DEG
 106.37055 LON DEG

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DIRECTION DEGREES TRUE	WIND SPEED KNOTS	WIND SPEED KNOTS	WIND SPEED KNOTS	INDEX OF REFRACTION
43500.0	100.8	-61.2	274.1	567.1	230.9	50.5	1.0000001	
44000.0	162.7	-61.0	267.3	567.4	230.0	50.1	1.0000000	
44500.0	150.8	-60.8	260.6	567.0	230.7	50.0	1.0000058	
45000.0	155.0	-60.7	254.1	567.9	231.0	50.4	1.0000057	
45500.0	151.2	-60.5	247.7	568.2	232.4	50.7	1.0000055	
46000.0	147.6	-60.8	242.1	567.7	230.9	50.8	1.0000054	
46500.0	144.0	-61.3	236.0	567.1	243.1	50.8	1.0000053	
47000.0	140.0	-61.0	230.9	567.4	247.2	50.8	1.0000051	
47500.0	137.2	-60.8	225.1	567.7	243.0	50.2	1.0000050	
48000.0	133.9	-60.5	219.4	568.1	242.7	49.8	1.0000049	
48500.0	130.7	-60.3	213.9	568.4	242.1	49.3	1.0000048	
49000.0	127.6	-60.0	208.5	568.7	244.0	48.8	1.0000046	
49500.0	124.5	-59.8	203.0	569.0	243.9	48.4	1.0000045	
50000.0	121.5	-59.6	198.2	569.4	240.0	47.8	1.0000044	
50500.0	118.6	-59.3	193.2	569.7	230.2	47.3	1.0000043	
51000.0	115.8	-59.1	188.4	570.0	232.2	46.9	1.0000042	
51500.0	113.0	-59.0	183.7	570.2	230.2	47.2	1.0000041	
52000.0	110.3	-59.1	179.5	569.9	234.1	47.5	1.0000040	
52500.0	107.6	-59.3	175.4	569.7	234.0	46.2	1.0000039	
53000.0	105.1	-59.5	171.3	569.4	235.0	43.3	1.0000038	
53500.0	102.5	-59.7	167.4	569.2	235.9	40.5	1.0000037	
54000.0	100.1	-59.9	163.5	568.9	237.7	36.7	1.0000036	
54500.0	97.7	-59.8	159.5	569.0	239.9	32.9	1.0000036	
55000.0	95.4	-59.7	155.7	569.1	241.4	30.2	1.0000035	
55500.0	93.1	-59.6	151.9	569.3	241.4	29.0	1.0000034	
56000.0	90.9	-59.5	148.2	569.4	241.4	27.9	1.0000033	
56500.0	88.7	-59.4	144.6	569.5	238.7	24.1	1.0000032	
57000.0	86.6	-59.4	141.0	569.6	234.0	20.2	1.0000031	
57500.0	84.5	-59.3	137.6	569.6	230.7	16.3	1.0000031	
58000.0	82.5	-59.2	134.0	569.9	240.2	12.5	1.0000030	
58500.0	80.5	-59.2	131.1	569.6	243.7	8.8	1.0000029	
59000.0	78.0	-59.6	128.2	569.3	232.0	9.1	1.0000029	
59500.0	76.7	-60.0	125.3	569.7	204.0	10.9	1.0000028	
60000.0	74.8	-60.5	122.0	568.2	197.0	13.7	1.0000027	
60500.0	73.0	-60.9	119.9	567.0	200.0	17.5	1.0000027	
61000.0	71.3	-61.3	117.2	567.1	202.9	21.4	1.0000026	
61500.0	69.6	-61.5	114.5	566.0	207.2	24.5	1.0000025	
62000.0	67.9	-61.0	111.5	567.5	212.1	27.3	1.0000025	
62500.0	66.3	-60.5	108.0	566.1	210.0	30.3	1.0000024	
63000.0	64.7	-60.0	105.0	565.0	219.4	29.1	1.0000024	

STATION ALTITUDE 5989.00 FEET MSL
 8 MAY 62 0926 MDT
 ASCENSION NO. 179

UHF AIR 0016
 1200020199
 WHITE SANDS

CONDUCTIVITY COEFFICIENTS
 52.00045 CAT 020
 106.57055 CON 226

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	WIND DIRECTION DEGREES TRUE	WIND SPEED MILES PER HOUR	WIND DATA		INDEX OF REFRACTION
						WIND SPEED MILES PER HOUR	WIND DIRECTION DEGREES TRUE	
63500.0	60.2	-59.5						
64000.0	61.7	-59.0						1.000025
64500.0	63.2	-58.5						1.000022
65000.0	64.8	-58.0						1.000021
65500.0	66.4	-57.5						1.000020
66000.0	68.0	-57.0						1.000020
66500.0	69.7	-56.5						1.000019
67000.0	71.4	-56.1						1.000019
67500.0	73.1	-55.6						1.000018
68000.0	74.9	-55.1						1.000018
68500.0	76.6	-54.6						1.000017
69000.0	78.4	-54.4						1.000017
69500.0	80.1	-54.2						1.000016
70000.0	81.9	-54.0						1.000016
70500.0	83.7	-53.8						1.000015
71000.0	85.4	-53.5						1.000015
71500.0	87.2	-53.3						1.000015
72000.0	89.0	-53.1						1.000015
72500.0	90.8	-52.9						1.000015
73000.0	92.6	-52.7						1.000014
73500.0	94.4	-52.4						1.000014
74000.0	96.2	-52.2						1.000013
74500.0	98.0	-52.0						1.000013
75000.0	99.8	-51.8						1.000013
75500.0	101.6	-51.6						1.000013
76000.0	103.4	-51.5						1.000012
76500.0	105.2	-51.1						1.000012
77000.0	107.0	-50.9						1.000011
77500.0	108.8	-50.7						1.000011
78000.0	110.6	-50.5						1.000011
78500.0	112.4	-50.3						1.000011
79000.0	114.2	-50.0						1.000011
79500.0	116.0	-49.7						1.000010
80000.0	117.8	-49.4						1.000010
80500.0	119.6	-49.0						1.000010
81000.0	121.4	-48.6						1.000010
81500.0	123.2	-48.2						1.000009
82000.0	125.0	-47.8						1.000009
82500.0	126.8	-47.5						1.000009
83000.0	128.6	-47.1						1.000009

STATION ALTITUDE 3989.00 FEET MSL
 8 MAY 62 0926 MDT
 ASCENSION NO. 199

UPPER AIR DATA
 1230020199
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.57033 LON DEG

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) MAGNITUDE (IN) KNOTS	INDEX OF REFRACTION
03500.0	24.8	-46.7		36.1	586.2		1.000008
04000.0	24.2	-46.3		37.2	586.7		1.000008
04500.0	23.6	-46.0		36.3	587.2		1.000008
05000.0	23.1	-45.6		35.4	587.7		1.000008

STATION ALTITUDE 3909.00 FEET MSL
 8 MAY 62 0926 MDT
 ASCENSION NO. 199

MANDATORY LEVELS
 1280020199
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 100.37033 LONG DEG

TABLE 21

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE		REL. HUM. PERCENT	"LOW DATA"	
		AIR DEGREES CENTIGRADE	TEMP DEGREES CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4420.	17.5	-1.2	20.	180.1	0.5
800.0	6619.	16.4	-2.3	28.	180.2	13.1
750.0	8405.	11.9	-5.2	30.	207.2	14.5
700.0	10283.	7.2	-8.4	32.	220.3	10.1
650.0	12264.	1.8	-10.3	39.	232.1	10.6
600.0	14359.	-4.2	-13.9	47.	232.2	21.0
550.0	16584.	-9.9	-24.7	29.	239.3	20.2
500.0	18973.	-15.2	-33.0	20.	240.0	25.1
450.0	21558.	-20.6	-37.2	21.	251.2	25.6
400.0	24386.	-25.9	-41.7	21.	244.4	32.2
350.0	27519.	-32.9	-46.5	24.	244.3	33.5
300.0	31011.	-41.0			242.2	
250.0	35004.	-50.1			243.0	31.0
200.0	39082.	-59.3			244.0	43.3
175.0	42403.	-61.6			250.4	50.0
150.0	45540.	-60.4			252.2	50.0
125.0	49270.	-59.8			245.3	40.5
100.0	53853.	-59.9			257.7	30.7
89.0	58435.	-59.3			240.0	0.5
70.0	61165.	-61.6			205.4	23.0
60.0	64322.	-58.4			250.9	21.5
50.0	68117.	-54.7			234.2	11.6
40.0	72824.	-52.6			204.0	0.0
30.0	78958.	-49.9			291.0	4.6
25.0	82896.	-46.9				

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

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62
 ASCENSION: NO. 134

SIGMET ICAUT LEVEL DATA
 120010134
 HOLLANDIA

GEODETIC COORDINATES
 02.83865 LAT DEG
 100.09965 LONG DEG

TABLE 22

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT PERCENT	REL. HUM. PERCENT
874.2	4126.6	17.9	-6.2	16.0
863.2	4481.7	17.8	.0	30.0
853.0	4796.6	19.7	-0.3	26.0
850.0	4915.8	19.2	-0.7	26.0
779.2	7340.6	14.2	-4.0	28.0
700.0	10278.0	6.8	-8.2	33.0
566.8	15815.7	-8.8	-16.4	54.0
541.1	16993.0	-11.0	-22.0	37.0
500.0	18970.7	-15.7	-29.0	29.0
400.0	24400.5	-25.6	-40.1	24.0
312.0	30184.0	-37.8	-43.0	27.0
300.0	31069.9	-40.0		
250.0	35087.1	-49.4		
200.0	39783.0	-60.7		
158.3	44552.4	-63.0		
154.2	45087.0	-61.3		
150.0	45651.4	-61.7		
137.8	47380.8	-62.4		
125.5	48659.5	-57.7		
109.4	52162.9	-58.6		
100.0	54018.6	-60.2		
91.7	55790.2	-63.0		
80.4	58676.5	-60.7		
74.4	60059.6	-63.4		
70.0	61308.2	-59.3		
56.4	65767.4	-60.2		
53.5	66868.1	-55.1		
50.0	68290.8	-56.6		
45.6	70232.5	-54.1		
43.8	71084.1	-55.3		
40.4	72799.2	-52.5		
30.0	79179.3	-51.1		
24.1	83910.2	-49.3		
20.0	87996.5	-44.9		
12.9	97820.2	-39.5		
10.0	103613.1	-38.1		

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 134

UPPER AIR DATA
 12R0016134
 HOLLOWAY

TABLE 23

GEODETIC COORDINATES
 32.00865 LAT DEG
 106.05965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4126.0	874.2	17.9	16.0	1094.9	665.1	210.0	6.0	1.000247
4500.0	802.6	17.9	29.8	1029.7	655.5	193.4	7.2	1.000257
5000.0	847.4	19.0	26.1	1007.0	650.8	180.2	9.1	1.000250
5500.0	832.4	18.0	26.5	993.5	650.0	181.0	11.2	1.000246
6000.0	817.7	17.0	26.9	979.5	654.4	183.9	11.5	1.000242
6500.0	803.2	15.9	27.3	965.6	653.2	190.1	10.9	1.000238
7000.0	788.9	14.9	27.7	951.9	652.0	196.0	10.1	1.000234
7500.0	774.8	13.8	28.3	938.0	650.7	201.7	9.9	1.000230
8000.0	760.8	12.6	29.1	925.7	653.2	208.1	10.2	1.000226
8500.0	747.0	11.3	30.0	913.1	657.7	208.5	10.9	1.000222
9000.0	733.5	10.0	30.8	900.6	656.2	210.0	11.9	1.000219
9500.0	720.2	8.8	31.7	888.5	654.7	210.2	14.1	1.000215
10000.0	707.2	7.5	32.5	876.2	653.2	220.0	16.5	1.000211
10500.0	694.1	6.2	33.8	864.2	651.7	224.5	19.3	1.000208
11000.0	681.0	4.8	35.7	852.2	650.0	227.0	20.6	1.000205
11500.0	668.1	3.4	37.6	840.2	648.5	230.0	21.4	1.000202
12000.0	655.5	1.9	39.5	828.6	646.7	233.9	20.8	1.000199
12500.0	643.2	.5	41.4	817.4	645.0	235.9	20.5	1.000195
13000.0	631.0	-.9	43.3	806.1	643.5	239.2	20.6	1.000192
13500.0	619.1	-2.3	45.2	795.1	641.0	241.5	20.7	1.000189
14000.0	607.4	-3.7	47.1	784.2	639.9	244.0	20.9	1.000186
14500.0	595.9	-5.1	49.0	773.5	638.2	245.0	21.1	1.000183
15000.0	584.7	-6.5	50.9	762.9	636.5	242.4	21.7	1.000180
15500.0	573.7	-7.9	52.8	752.0	634.8	240.0	22.9	1.000177
16000.0	562.7	-9.1	51.3	741.7	633.5	240.9	24.8	1.000174
16500.0	551.7	-10.1	44.1	730.0	622.1	242.7	26.8	1.000169
17000.0	540.9	-11.0	37.0	718.4	621.0	243.5	26.6	1.000165
17500.0	530.3	-12.2	34.9	707.5	629.5	240.7	25.6	1.000162
18000.0	519.8	-13.4	32.9	696.7	626.0	243.9	23.3	1.000159
18500.0	509.5	-14.6	30.9	686.1	620.0	252.2	22.4	1.000156
19000.0	499.4	-15.8	29.0	675.6	625.1	255.6	22.4	1.000153
19500.0	489.2	-16.7	28.5	664.5	624.0	252.1	23.6	1.000151
20000.0	479.3	-17.6	28.1	653.1	622.9	249.0	25.3	1.000148
20500.0	469.5	-18.5	27.6	642.1	621.8	249.7	27.4	1.000145
21000.0	460.0	-19.4	27.1	631.5	620.7	249.0	29.4	1.000143
21500.0	450.6	-20.3	26.7	620.7	619.5	249.0	30.6	1.000140
22000.0	441.5	-21.2	26.2	610.5	618.4	249.5	31.6	1.000138
22500.0	432.5	-22.1	25.8	600.1	617.3	249.0	32.0	1.000135
23000.0	423.7	-23.0	25.3	590.0	616.2	249.0	32.4	1.000133
23500.0	415.1	-24.0	24.6	580.2	615.0	249.9	32.4	1.000131

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 134

UPLR AIR DATA
 1280010134
 HOLLOWAY

GEOMETRIC ALTITUDE 4126.59 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 134

UPLR AIR DATA
 1280010134
 HOLLOWAY

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DIRECTION (REL. TO IN) DEGREES	WIND SPEED (IN) KIOTS	INDEX OF REFRACTION
24000.0	400.6	-24.9	24.4	570.5	613.9	249.0	32.4	1.000128
24500.0	390.3	-25.0	24.1	560.9	612.7	251.1	32.7	1.000126
25000.0	389.8	-26.9	24.3	551.3	611.4	251.5	33.1	1.000124
25500.0	361.5	-27.9	24.6	541.9	610.1	250.5	33.8	1.000122
26000.0	373.4	-29.0	24.8	532.7	608.8	249.0	34.2	1.000120
26500.0	365.5	-30.0	25.1	523.7	607.5	248.0	34.4	1.000117
27000.0	357.7	-31.1	25.3	514.8	606.2	246.2	34.5	1.000115
27500.0	350.1	-32.1	25.6	506.0	604.8	247.0	34.6	1.000113
28000.0	342.7	-33.2	26.1	497.5	603.5	247.0	34.8	1.000111
28500.0	335.4	-34.2	26.1	489.0	602.2	247.0	34.9	1.000109
29000.0	328.3	-35.3	26.4	480.6	600.8	247.4	34.2	1.000108
29500.0	321.3	-36.4	26.6	472.7	599.5	247.0	33.4	1.000106
30000.0	314.5	-37.4	26.9	464.7	598.2	246.6	31.0	1.000104
30500.0	307.7	-38.6	17.4**	456.9	596.7	246.7	28.8	1.000102
31000.0	300.9	-39.8		449.3	595.1	247.0	27.7	1.000100
31500.0	294.2	-41.0	21.1**	441.5	593.5	246.0	26.7	1.000098
32000.0	287.6	-42.2		433.6	592.1	247.5	27.4	1.000097
32500.0	281.1	-43.3		426.2	590.6	246.3	28.0	1.000095
33000.0	274.8	-44.5		418.0	589.1	245.0	28.7	1.000093
33500.0	268.7	-45.7		411.5	587.6	243.4	29.4	1.000092
34000.0	262.6	-46.9		404.3	586.0	243.9	29.6	1.000090
34500.0	256.8	-48.0		397.3	584.5	240.7	29.6	1.000088
35000.0	251.0	-49.2		390.4	583.0	247.1	29.5	1.000087
35500.0	245.1	-50.4		383.4	581.4	247.0	29.2	1.000085
36000.0	239.4	-51.6		376.4	579.9	247.0	29.1	1.000084
36500.0	233.8	-52.8		369.6	578.3	243.1	29.5	1.000082
37000.0	228.3	-54.0		362.9	576.7	244.5	30.0	1.000081
37500.0	222.9	-55.2		356.3	575.1	243.3	30.8	1.000079
38000.0	217.7	-56.4		349.9	573.5	242.1	31.7	1.000078
38500.0	212.6	-57.6		343.6	571.9	241.4	33.0	1.000077
39000.0	207.6	-58.8		337.4	570.3	240.9	34.4	1.000075
39500.0	202.7	-60.0		331.3	568.7	241.4	36.7	1.000074
40000.0	197.9	-60.8		324.6	567.7	242.5	39.8	1.000072
40500.0	193.1	-61.0		317.1	567.4	243.0	42.2	1.000071
41000.0	188.4	-61.3		309.8	567.1	243.1	42.6	1.000069
41500.0	183.9	-61.5		302.7	566.7	240.7	43.1	1.000067
42000.0	179.4	-61.8		295.7	566.4	247.4	43.7	1.000066
42500.0	175.1	-62.0		288.6	566.1	248.0	44.3	1.000064
43000.0	170.8	-62.3		281.2	565.8	249.3	46.4	1.000063
43500.0	166.7	-62.5		273.6	565.4	250.0	49.0	1.000061

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

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62
 ASCENSION NO. 134

UPPER AIR DATA
 1200010134
 HOLLUMANN

0925 MDT

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	WIND DIRECTION (DEG)	WIND VELOCITY (KNOTS)	WIND VELOCITY (M/S)	WIND VELOCITY (KNOTS)	INDEX OF REFRACTION
4400.0	162.6	-62.7		269.3	363.1	50.1	251.5	50.1	1.000000
4450.0	156.7	-63.0		263.1	364.8	49.7	251.9	49.7	1.000059
4500.0	154.9	-61.6		255.0	360.7	49.4	252.0	49.4	1.000057
4550.0	151.1	-61.6		246.6	360.6	49.3	251.5	49.3	1.000055
4600.0	147.5	-61.8		243.1	360.3	49.3	250.4	49.3	1.000054
4650.0	143.9	-62.0		237.4	360.0	49.7	249.1	49.7	1.000053
4700.0	140.4	-62.2		231.9	363.8	50.4	246.0	50.4	1.000052
4750.0	137.0	-62.0		226.0	360.1	52.3	247.6	52.3	1.000050
4800.0	133.7	-60.1		218.7	360.0	53.7	247.0	53.7	1.000049
4850.0	130.5	-58.3		211.6	371.1	53.8	246.6	53.8	1.000047
4900.0	127.4	-57.0		206.1	371.7	53.4	247.4	53.4	1.000046
4950.0	124.4	-57.9		201.3	371.5	51.4	246.0	51.4	1.000045
5000.0	121.4	-58.0		196.6	371.4	49.3	243.9	49.3	1.000044
5050.0	118.5	-58.2		192.1	371.2	48.4	240.1	48.4	1.000043
5100.0	115.7	-58.3		187.6	371.0	47.6	240.4	47.6	1.000042
5150.0	112.9	-58.4		183.2	370.9	45.4	240.9	45.4	1.000041
5200.0	110.3	-58.6		179.0	370.7	43.1	231.4	43.1	1.000040
5250.0	107.6	-58.9		175.0	370.5	38.0	234.5	38.0	1.000039
5300.0	105.1	-59.3		171.2	369.7	32.0	200.0	32.0	1.000038
5350.0	102.5	-59.0		167.4	369.1	28.5	202.5	28.5	1.000037
5400.0	100.1	-60.2		163.7	368.5	27.1	201.0	27.1	1.000036
5450.0	97.7	-61.0		160.4	367.5	26.8	207.2	26.8	1.000036
5500.0	95.3	-61.8		157.1	366.4	26.7	200.5	26.7	1.000035
5550.0	93.0	-62.5		153.6	365.4	30.5	245.3	30.5	1.000034
5600.0	90.8	-62.8		150.3	365.0	30.6	245.3	30.6	1.000033
5650.0	88.6	-62.4		146.4	365.0	30.7	245.3	30.7	1.000033
5700.0	86.4	-62.0		142.6	366.1	27.3	247.7	27.3	1.000032
5750.0	84.3	-61.5		136.8	366.7	23.6	251.1	23.6	1.000031
5800.0	82.3	-61.1		135.2	367.3	19.4	253.6	19.4	1.000030
5850.0	80.3	-60.7		131.7	367.8	14.9	250.4	14.9	1.000029
5900.0	78.4	-61.6		129.0	366.6	13.7	250.1	13.7	1.000029
5950.0	76.5	-62.4		126.4	365.3	19.3	241.6	19.3	1.000028
6000.0	74.6	-63.3		123.9	364.4	25.4	253.7	25.4	1.000028
6050.0	72.8	-62.0		120.1	360.2	25.2	245.6	25.2	1.000027
6100.0	71.1	-60.3		116.3	360.4	25.7	245.2	25.7	1.000026
6150.0	69.4	-59.3		113.0	369.7	22.3	247.6	22.3	1.000025
6200.0	67.7	-59.4		110.3	369.5	16.2	193.2	16.2	1.000025
6250.0	66.1	-59.5		107.6	369.4	11.3	144.6	11.3	1.000024
6300.0	64.5	-59.6		105.2	369.3	8.9	144.5	8.9	1.000023
6350.0	62.9	-59.7		102.6	369.1	6.9	141.5	6.9	1.000023

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 82
 ASCENSION NO. 134

UJ PER AIR DATA
 1280010134
 HOLLOWMAN
 TABLE 23

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION (DEGREES TRUE)	WIND SPEED (KNOTS)	INDEX OF REFRACTION
64000.0	61.4	-59.8		100.5	569.0	222.5	8.8	1.000022
64500.0	60.0	-59.9		98.0	568.8	220.2	12.3	1.000022
65000.0	58.5	-60.0		95.7	568.7	227.4	16.1	1.000021
65500.0	57.1	-60.1		93.4	568.6	234.1	21.7	1.000021
66000.0	55.8	-59.1		90.8	569.9	238.0	27.4	1.000020
66500.0	54.5	-56.8		87.7	573.0	237.4	30.5	1.000020
67000.0	53.2	-55.2		85.0	575.1	237.5	32.4	1.000019
67500.0	51.9	-55.8		83.2	574.4	237.1	33.7	1.000019
68000.0	50.7	-56.3		81.4	573.7	236.6	31.3	1.000018
68500.0	49.5	-56.3		79.5	573.6	236.5	28.9	1.000018
69000.0	48.3	-55.7		77.4	574.5	234.5	22.5	1.000017
69500.0	47.2	-55.0		75.4	575.5	225.7	12.1	1.000017
70000.0	46.1	-54.4		73.4	576.2	185.2	3.9	1.000016
70500.0	45.0	-54.5		71.7	576.1	188.9	5.3	1.000016
71000.0	44.0	-55.2		70.5	575.2	93.2	7.6	1.000016
71500.0	43.0	-54.6		68.5	575.9	88.4	9.5	1.000015
72000.0	42.0	-53.8		66.6	577.0	108.4	5.3	1.000015
72500.0	41.0	-53.0		64.8	578.1	171.0	4.0	1.000014
73000.0	40.0	-52.5		63.2	578.7	200.9	5.6	1.000014
73500.0	39.1	-52.3		61.7	578.9	135.2	4.8	1.000014
74000.0	38.2	-52.2		60.2	579.0	187.5	4.1	1.000013
74500.0	37.3	-52.1		58.8	579.2	187.2	3.7	1.000013
75000.0	36.5	-52.0		57.4	579.5	194.7	3.5	1.000013
75500.0	35.6	-51.9		56.1	579.5	202.6	3.4	1.000012
76000.0	34.8	-51.8		54.8	579.6	199.0	2.7	1.000012
76500.0	34.0	-51.7		53.5	579.8	161.8	1.9	1.000012
77000.0	33.2	-51.6		52.2	579.9	145.1	1.5	1.000012
77500.0	32.4	-51.5		51.0	580.0	146.4	1.2	1.000011
78000.0	31.7	-51.4		49.8	580.2	133.9	.9	1.000011
78500.0	31.0	-51.2		48.6	580.5	130.5	.8	1.000011
79000.0	30.3	-51.1		47.5	580.5	235.4	2.8	1.000011
79500.0	29.6	-51.0		46.5	580.7	241.2	5.3	1.000010
80000.0	28.9	-50.8		45.2	580.9	243.2	7.8	1.000010
80500.0	28.2	-50.6		44.2	581.2	230.2	6.7	1.000010
81000.0	27.6	-50.4		43.1	581.4	230.0	9.7	1.000010
81500.0	26.9	-50.2		42.1	581.7	200.7	10.9	1.000009
82000.0	26.3	-50.0		41.1	581.9	204.6	13.4	1.000009
82500.0	25.7	-49.8		40.1	582.2	207.5	16.1	1.000009
83000.0	25.1	-49.6		39.2	582.4	209.5	18.6	1.000009
83500.0	24.6	-49.5		38.5	582.7	209.6	20.6	1.000009

STATION ALTITUDE 4120.59 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 134

UPPER AIR DATA
 1280010134
 HOLLOWMAN

CLOUDTIC COORDINATES
 52.00805 LAT DEG
 100.09305 LON DEG

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED GIGS	INDEX OF REFRACTION
04000.0	24.0	-49.2		37.3	583.0	270.2	1.000008
04500.0	23.5	-48.7		30.4	583.7	270.5	1.000008
05000.0	22.9	-48.1		35.5	584.4	274.5	1.000008
05500.0	22.4	-47.6		34.6	585.1	282.2	1.000008
06000.0	21.9	-47.0		33.8	585.8	292.5	1.000008
06500.0	21.4	-46.5		32.9	586.5	304.3	1.000007
07000.0	20.9	-46.0		32.1	587.2	303.9	1.000007
07500.0	20.5	-45.4		31.3	587.9	307.6	1.000007
08000.0	20.0	-44.9		30.5	588.6	310.2	1.000007
08500.0	19.6	-44.6		29.8	588.9	296.0	1.000007
09000.0	19.1	-44.3		29.1	589.3	270.0	1.000006
09500.0	18.7	-44.1		28.4	589.6	260.7	1.000006
10000.0	18.3	-43.8		27.8	590.0	250.1	1.000006
10500.0	17.9	-43.5		27.1	590.3	244.6	1.000006
11000.0	17.5	-43.2		26.5	590.7	235.0	1.000006
11500.0	17.1	-43.0		25.9	591.1	236.4	1.000006
12000.0	16.7	-42.7		25.3	591.4	233.3	1.000006
12500.0	16.4	-42.4		24.7	591.8	240.5	1.000005
13000.0	16.0	-42.1		24.1	592.1	240.0	1.000005
13500.0	15.6	-41.9		23.5	592.5	251.7	1.000005
14000.0	15.3	-41.6		23.0	592.8	255.6	1.000005
14500.0	15.0	-41.3		22.5	593.2	260.2	1.000005
15000.0	14.6	-41.1		22.0	593.5	264.7	1.000005
15500.0	14.3	-40.8		21.4	593.9	267.2	1.000005
16000.0	14.0	-40.5		21.0	594.2	267.4	1.000005
16500.0	13.7	-40.2		20.5	594.6	267.6	1.000005
17000.0	13.4	-40.0		20.0	594.9	267.9	1.000004
17500.0	13.1	-39.7		19.5	595.3	270.7	1.000004
18000.0	12.8	-39.5		19.1	595.5	273.4	1.000004
18500.0	12.5	-39.3		18.7	595.7	275.6	1.000004
19000.0	12.2	-39.2		18.2	595.9	275.2	1.000004
19500.0	12.0	-39.1		17.8	596.0	266.0	1.000004
100000.0	11.7	-39.0		17.4	596.2	262.1	1.000004
105000.0	11.5	-38.9		17.0	596.3	257.7	1.000004
101000.0	11.2	-38.7		16.7	596.5		1.000004
101500.0	11.0	-38.6		16.3	596.8		1.000004
102000.0	10.7	-38.5		15.9	596.8		1.000004
102500.0	10.5	-38.4		15.6	596.9		1.000003
103000.0	10.3	-38.2		15.2	597.1		1.000003
103500.0	10.0	-38.1		14.9	597.2		1.000003

STATION ALTITUDE 4126.59 FEET MSL
 8 MAY 62
 ASCENSION NO. 134

MANDATORY LEVELS
 1280010134
 HULLOMAN
 TABLE 24

GEODETTIC COORDINATES
 52.88865 LAT DEG
 106.09985 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUMIDITY PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4912.	19.2	-7	20.	189.7	3.7
800.0	6610.	15.7	-3.0	27.	191.3	10.8
750.0	8393.	11.6	-5.5	30.	200.1	10.8
700.0	10268.	6.8	-8.3	33.	222.0	10.0
650.0	12246.	1.3	-10.0	40.	235.0	20.6
600.0	14337.	-4.6	-13.0	48.	243.7	21.0
550.0	16560.	-10.2	-20.4	43.	243.0	20.8
500.0	18945.	-15.7	-29.0	29.	253.0	22.4
450.0	21529.	-20.4	-34.0	27.	249.0	30.7
400.0	24361.	-25.6	-40.1	24.	250.0	32.6
350.0	27490.	-32.2	-45.3	20.	247.0	34.6
300.0	31010.	-40.0			247.9	27.0
250.0	35012.	-49.4			247.1	29.4
200.0	39689.	-60.7			242.0	30.4
175.0	42407.	-62.0			248.0	44.3
150.0	45531.	-61.7			251.1	49.3
125.0	49250.	-57.9			249.0	51.9
100.0	53854.	-60.2			201.0	27.1
80.0	58388.	-60.9			250.0	14.5
70.0	61101.	-59.3			210.2	20.2
60.0	64264.	-59.9			220.0	12.0
50.0	68037.	-56.6			230.0	30.0
40.0	72724.	-52.5			201.2	9.6
30.0	78844.	-51.1			237.9	3.5
25.0	82747.	-49.6			209.4	10.9
20.0	87587.	-44.9			310.0	11.2
15.0	93946.	-41.4			259.0	13.6
10.0	103053.	-38.1				

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

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62
 ASCENSION 140. 37

SIGNIFICANT LEVEL DATA
 12800300J7
 CALLEN

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

TABLE 25

GEOMETRIC ALTITUDE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
877.5	4051.0	17.5	7.0	50.0
875.4	4118.2	17.3	-4.0	22.0
850.0	4939.7	15.5	-6.1	22.0
844.9	5106.9	14.9	-6.0	22.0
841.8	5209.2	16.7	-5.1	22.0
796.2	6761.6	15.5	-6.7	21.0
700.0	10267.7	6.5	-12.1	25.0
612.0	13942.8	-3.0	-16.1	37.0
554.7	16361.6	-11.0	-18.4	54.0
549.4	16604.0	-11.1	-29.0	20.0
540.0	17039.6	-11.1	-31.5	17.0
500.0	18964.7	-15.9	-31.5	25.0
433.4	22451.6	-24.1	-37.0	29.0
418.0	23318.6	-24.9	-40.0	21.0
400.0	24368.3	-26.5	-42.2	21.0
357.8	26984.5	-32.9	-46.1	25.0
343.8	27904.5	-35.2	-48.1	25.0
323.6	29287.5	-37.3	-50.5	24.0
300.0	30998.7	-40.3		
285.0	32144.0	-42.9		
250.0	35003.9	-50.0		
216.0	38102.5	-57.6		
200.0	39692.2	-60.6		
191.0	40633.2	-62.2		
167.6	43294.4	-62.2		
150.0	45549.8	-63.0		
142.2	46650.2	-64.3		
139.8	46975.8	-62.4		
130.6	48370.5	-59.4		
128.7	48674.1	-58.0		
123.2	49579.0	-59.3		
119.6	50192.6	-58.6		
107.9	52312.7	-61.4		
102.6	53344.9	-60.7		
100.0	53871.3	-61.2		
95.2	54875.5	-62.6		
85.9	56990.4	-58.0		
75.8	59563.9	-62.7		
70.0	61186.9	-61.9		
62.6	63977.1	-61.1		

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 57

SIGHT PLANT -EVELL DATA
 1280030037
 JALLEN

GEODLTIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

TABLE 25 Cont'd

GEOMETRIC ALTITUDE	TEMPERATURE	REL. HUM.
MILLIBARS MSL FEET	AIR DEGREE	PERCENT
	DEGREE	
	CENTIGRADE	
58.4 64910.3	-57.6	
54.8 66232.2	-59.2	
52.6 67088.6	-55.1	
50.0 68156.5	-55.8	
44.0 70835.6	-57.4	
39.4 73172.4	-51.7	
30.0 79025.9	-51.1	
24.4 83489.2	-49.3	
20.0 87837.6	-45.8	
14.9 94494.7	-44.3	
12.9 97570.3	-41.2	

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 37

UPPER AIR DATA
 12000-00057
 WILLEN

GEOMETRIC COORDINATES
 3.16712 LAT DEG
 106.49511 LONG DEG

TABLE 26

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION OF DECELERATION	ANGLE OF REFRACTION
4051.0	871.5	17.5	50.0	1047.2	665.0	110.0	2.9
4500.0	863.5	-5.3	22.0	1030.8	663.6	100.0	3.1
5000.0	840.2	15.3	22.0	1022.0	662.2	140.0	3.6
5500.0	833.1	16.5	21.8	1000.2	663.6	101.5	4.2
6000.0	818.3	16.1	21.5	983.7	663.2	172.5	5.4
6500.0	803.7	15.7	21.2	967.0	662.7	152.7	6.7
7000.0	789.3	14.9	21.3	953.0	661.8	204.5	8.5
7500.0	775.0	13.6	21.8	939.9	660.3	212.5	10.3
8000.0	761.0	12.3	22.4	927.1	659.0	210.5	12.3
8500.0	747.2	11.1	23.0	914.5	657.3	217.4	14.3
9000.0	733.7	9.8	23.5	902.0	655.8	210.4	16.2
9500.0	720.4	8.5	24.1	889.0	654.3	219.2	17.8
10000.0	707.4	7.2	24.7	877.7	652.8	221.2	19.0
10500.0	694.4	5.9	25.7	865.8	651.2	224.0	19.7
11000.0	681.4	4.5	27.4	853.9	649.5	225.2	20.1
11500.0	668.7	3.1	29.1	842.3	647.9	226.1	20.1
12000.0	655.1	1.6	30.8	830.0	646.2	225.0	20.3
12500.0	643.9	.2	32.5	819.5	644.5	225.0	20.8
13000.0	631.8	-1.2	34.2	809.4	642.8	225.4	21.3
13500.0	620.0	-2.6	35.8	797.5	641.1	225.0	22.0
14000.0	608.3	-4.1	38.1	786.0	639.4	225.0	22.5
14500.0	596.5	-5.5	41.4	775.7	637.7	225.0	23.0
15000.0	585.0	-7.0	44.8	764.9	635.9	225.2	23.3
15500.0	573.7	-8.5	48.2	754.3	634.1	225.6	23.6
16000.0	562.6	-9.9	51.6	743.0	632.4	225.7	23.2
16500.0	551.7	-11.1	54.6	732.0	630.5	225.8	23.8
17000.0	540.8	-11.1	17.3	720.8	630.7	225.9	21.9
17500.0	530.2	-12.2	18.3	707.7	629.4	225.6	21.1
18000.0	519.7	-13.5	21.0	697.0	627.9	225.6	20.9
18500.0	509.4	-14.7	23.1	686.5	626.4	225.6	20.9
19000.0	499.3	-16.0	25.0	676.1	624.8	225.1	21.0
19500.0	489.1	-17.2	26.6	665.4	623.4	225.0	22.1
20000.0	479.2	-18.3	26.2	655.6	621.9	225.0	22.3
20500.0	469.5	-19.5	26.8	644.7	620.5	225.0	22.8
21000.0	460.0	-20.7	27.3	634.5	619.1	225.1	23.2
21500.0	450.6	-21.0	27.9	624.0	617.6	225.0	23.0
22000.0	441.5	-23.0	28.5	614.0	616.2	225.7	26.4
22500.0	432.5	-24.1	28.6	603.0	614.8	225.0	31.1
23000.0	423.6	-24.6	23.0	593.0	613.2	225.0	33.0
23500.0	414.8	-25.2	21.0	582.7	611.5	225.0	33.0

STATION ALTITUDE 4051.00 FEET MSL
 R MAY 62
 ASCENSION NO. 37

UPPER AIR DATA
 1280030337
 JALLEN

GEOMETRIC ALTITUDE 4051.00 FEET MSL
 0925 MDT

CLOUDS
 33.16712 LAT DEG
 106.49511 LON DEG

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (IN)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	400.2	-25.9	21.0	572.4	612.0	240.0	33.5	1.000128
24500.0	397.8	-26.8	21.2	562.5	611.5	240.5	34.4	1.000126
25000.0	389.4	-28.0	22.0	553.3	610.0	240.0	35.4	1.000124
25500.0	381.2	-29.3	22.7	544.4	608.4	247.0	36.5	1.000122
26000.0	373.1	-30.5	23.5	535.0	606.9	247.5	36.8	1.000120
26500.0	365.3	-31.7	24.3	527.0	605.4	247.7	36.0	1.000118
27000.0	357.6	-32.9	25.0	518.5	603.8	247.4	35.4	1.000116
27500.0	349.9	-34.2	25.0	510.0	602.3	240.0	34.9	1.000114
28000.0	342.4	-35.3	24.9	501.5	600.8	243.2	33.7	1.000112
28500.0	335.0	-36.1	24.6	492.2	599.8	243.4	32.3	1.000110
29000.0	327.7	-36.9	24.2	483.1	598.9	243.0	31.8	1.000108
29500.0	320.6	-37.7	21.0**	474.2	597.8	242.9	31.4	1.000106
30000.0	313.6	-38.5	14.0**	465.0	596.7	243.5	32.0	1.000104
30500.0	306.7	-39.4	7.0**	457.1	595.6	243.0	33.9	1.000102
31000.0	300.0	-40.3		448.0	594.5	244.0	34.1	1.000100
31500.0	293.3	-41.4		441.0	593.0	244.2	34.4	1.000098
32000.0	286.8	-42.6		433.4	591.6	243.5	34.3	1.000097
32500.0	280.4	-43.8		425.9	590.0	240.4	34.2	1.000095
33000.0	274.1	-45.0		418.5	588.4	240.5	34.0	1.000093
33500.0	267.9	-46.3		411.3	586.8	240.5	33.7	1.000092
34000.0	261.8	-47.5		404.2	585.2	240.4	33.7	1.000090
34500.0	255.9	-48.7		397.2	583.6	240.0	33.9	1.000088
35000.0	250.1	-50.0		390.4	582.0	240.0	33.9	1.000087
35500.0	244.3	-51.2		383.4	580.4	247.0	33.9	1.000085
36000.0	238.6	-52.4		376.5	578.8	240.0	34.1	1.000084
36500.0	233.0	-53.7		369.6	577.2	243.1	34.9	1.000082
37000.0	227.6	-54.9		362.2	575.5	243.7	35.7	1.000081
37500.0	222.2	-56.1		356.7	573.9	243.5	36.7	1.000079
38000.0	217.0	-57.3		350.4	572.3	242.0	37.6	1.000078
38500.0	211.9	-58.4		343.6	571.0	243.5	39.4	1.000077
39000.0	206.0	-59.3		336.9	569.7	243.0	41.1	1.000075
39500.0	201.9	-60.2		330.5	568.5	244.5	42.9	1.000074
40000.0	197.0	-61.1		323.7	567.3	244.0	44.6	1.000072
40500.0	192.2	-62.0		317.1	566.1	243.5	46.2	1.000071
41000.0	187.6	-62.2		309.8	565.0	243.0	47.7	1.000069
41500.0	183.0	-62.2		302.5	563.8	240.1	49.0	1.000067
42000.0	178.6	-62.2		294.9	562.6	240.2	50.3	1.000066
42500.0	174.3	-62.2		287.8	561.6	240.4	51.1	1.000064
43000.0	170.0	-62.2		280.6	560.8	247.2	50.0	1.000063
43500.0	165.9	-62.3		274.1	560.7	247.9	50.1	1.000061

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

STATION ALTITUDE 6051.00 FEET MSL
 8 MAY 82
 ASCENSION NO. 37

UPPER AIR DATA
 1700000037
 JALLIN
 TABLE 26 Cont'd

GEOMETRIC ALTITUDE
 MSL FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND VELOCITY KM/HR	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	101.9	-62.5		267.7	565.5		50.4	1.000060
44500.0	107.9	-62.6		261.4	505.3		50.7	1.000058
45000.0	104.1	-62.8		255.2	505.0		50.9	1.000057
45500.0	100.4	-63.0		249.2	504.8		51.0	1.000056
46000.0	100.7	-63.5		245.6	504.0		51.1	1.000054
46500.0	103.1	-64.1		238.5	503.2		51.0	1.000053
47000.0	109.6	-62.3		230.7	505.6		51.0	1.000051
47500.0	100.3	-61.3		224.0	507.1		50.8	1.000050
48000.0	103.0	-60.2		217.5	508.5		50.7	1.000048
48500.0	129.8	-58.8		210.9	570.4		50.0	1.000047
49000.0	120.7	-58.5		205.6	570.8		49.3	1.000046
49500.0	120.7	-59.2		201.4	509.9		48.1	1.000045
50000.0	120.7	-58.8		196.2	570.3		46.8	1.000044
50500.0	117.0	-59.0		191.7	570.1		45.2	1.000043
51000.0	115.0	-59.7		187.7	509.2		43.2	1.000042
51500.0	112.2	-60.3		183.7	505.5		41.9	1.000041
52000.0	109.6	-61.0		179.9	567.5		42.3	1.000040
52500.0	100.9	-61.3		175.0	567.1		42.8	1.000039
53000.0	104.3	-60.9		171.5	567.5		43.0	1.000038
53500.0	101.0	-60.8		167.1	507.6		43.1	1.000037
54000.0	99.4	-61.4		163.5	565.9		42.3	1.000036
54500.0	97.0	-62.1		160.0	560.0		40.7	1.000036
55000.0	94.6	-62.3		156.4	565.7		39.0	1.000035
55500.0	92.4	-61.2		151.0	567.1		35.3	1.000034
56000.0	90.1	-60.2		147.4	568.6		31.5	1.000033
56500.0	88.0	-59.1		143.2	570.0		26.5	1.000032
57000.0	85.9	-58.0		139.0	571.4		19.5	1.000031
57500.0	83.8	-58.9		136.3	570.2		12.4	1.000030
58000.0	81.0	-59.8		133.0	509.0		8.0	1.000030
58500.0	79.8	-60.8		130.9	507.8		6.0	1.000029
59000.0	77.9	-61.7		126.5	560.5		4.6	1.000029
59500.0	76.0	-62.6		125.0	565.5		7.0	1.000028
60000.0	74.2	-62.5		122.7	505.4		10.7	1.000027
60500.0	72.4	-62.2		119.0	505.8		14.3	1.000027
61000.0	70.6	-62.0		116.5	560.1		17.7	1.000026
61500.0	69.9	-61.8		113.0	506.4		21.1	1.000025
62000.0	67.3	-61.6		110.0	560.6		22.5	1.000025
62500.0	65.7	-61.4		108.0	500.6		23.4	1.000024
63000.0	64.1	-61.3		105.5	567.1		23.3	1.000023
63500.0	62.5	-61.0		102.7	507.4		20.2	1.000023

STATION ALTITUDE 4051.0 FEET MSL
 8 MAY 62 0925 MDT
 ASCENSION NO. 57

UPPER AIR DATA
 1280000007
 JALLEN

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49311 LONG DEG

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY (GM/CUBIC METER)	WIND SPEED (KNOTS)	WIND DIRECTION (DEGREES (TR))	WIND DATA SPEED (KNOTS)	INDEX OF REFRACTION
04000.0	23.8	-48.9	37.0	583.4	291.2		12.2	1.000006
04500.0	23.3	-48.5	36.1	583.9	296.4		12.9	1.000008
05000.0	22.8	-48.1	35.2	584.5	304.7		13.8	1.000008
05500.0	22.3	-47.7	34.4	585.0	307.2		13.2	1.000007
06000.0	21.8	-47.3	33.6	585.5	306.6		11.9	1.000007
06500.0	21.3	-46.9	32.7	586.0	310.4		10.7	1.000007
07000.0	20.8	-46.5	31.9	586.5	309.2		9.0	1.000007
07500.0	20.3	-46.1	31.2	587.1	304.6		7.0	1.000007
08000.0	19.9	-45.8	30.4	587.5	296.6		5.2	1.000007
08500.0	19.4	-45.7	29.7	587.6	276.5		4.9	1.000007
09000.0	19.0	-45.5	29.0	587.7	256.6		6.5	1.000006
09500.0	18.6	-45.4	28.4	587.9	243.3		8.5	1.000006
10000.0	18.1	-45.3	27.7	588.0	247.2		10.7	1.000006
10500.0	17.7	-45.2	27.1	588.2	244.2		13.0	1.000006
11000.0	17.3	-45.1	26.5	588.3	244.2		15.4	1.000006
11500.0	16.9	-45.0	25.9	588.5	242.1		16.9	1.000006
12000.0	16.6	-44.9	25.3	588.6	240.6		16.1	1.000006
12500.0	16.2	-44.8	24.7	588.8	235.0		15.3	1.000005
13000.0	15.8	-44.6	24.1	588.9	237.3		14.8	1.000005
13500.0	15.5	-44.5	23.6	589.1	230.6		15.7	1.000005
14000.0	15.1	-44.4	23.1	589.2	233.3		16.6	1.000005
14500.0	14.8	-44.3	22.3	589.3				1.000005
15000.0	14.5	-43.8	22.0	590.0				1.000005
15500.0	14.2	-43.3	21.4	590.6				1.000005
16000.0	13.8	-42.8	20.9	591.3				1.000005
16500.0	13.5	-42.3	20.4	591.9				1.000005
17000.0	13.2	-41.8	19.9	592.6				1.000004
17500.0	12.9	-41.3	19.4	593.2				1.000004

STATION ALTITUDE 4051.00 FEET MSL
 8 MAY 82
 ASCENSION 110. 37 0925 MDT

MANDATORY LEVELS
 1280030037
 JALLEN

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LON DEG

TABLE 27

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUMID. PERCENT	WIND DATA	
		AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4930.	15.5	-6.1	22.	147.0	3.5
800.0	6624.	15.6	-6.0	21.	190.4	7.2
750.0	8405.	11.3	-9.1	23.	217.2	14.0
700.0	10278.	6.5	-12.1	20.	222.0	19.4
650.0	12252.	.9	-14.0	32.	232.2	20.5
600.0	14340.	-5.1	-16.4	40.	239.9	22.8
550.0	16556.	-11.1	-17.7	24.	242.5	22.7
500.0	18939.	-15.9	-31.5	25.	250.1	21.5
450.0	21514.	-21.9	-35.5	20.	239.4	23.8
400.0	24329.	-26.5	-42.2	21.	248.4	34.2
350.0	27446.	-34.2	-47.2	25.	240.0	34.9
300.0	30939.	-40.3			244.0	34.1
250.0	34935.	-50.0			240.0	33.9
200.0	39000.	-60.6			244.0	43.5
175.0	42310.	-62.2			240.0	51.2
150.0	45431.	-63.0			247.1	51.0
125.0	49142.	-58.9			253.4	40.8
100.0	53709.	-61.2			253.5	42.8
80.0	58273.	-60.7			230.0	0.5
70.0	60981.	-61.9			210.2	10.7
60.0	64123.	-59.0			237.0	14.0
50.0	67905.	-55.8			194.7	10.2
40.0	72564.	-52.5			223.0	4.9
30.0	78093.	-51.1			239.0	13.3
25.0	82598.	-49.5			201.2	11.5
20.0	87431.	-45.8			300.4	5.9
15.0	93736.	-44.4			204.0	10.9

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

