AD-A092 779 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12830C LANCE, MISSILE NUMBER 2227, ROUND NUMBER 356-DST, 30 SEP--ETC(U)
SEP 80

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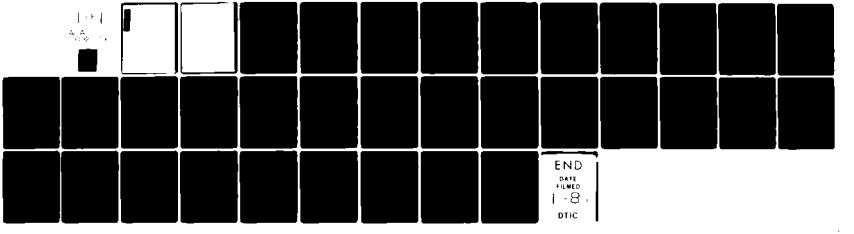

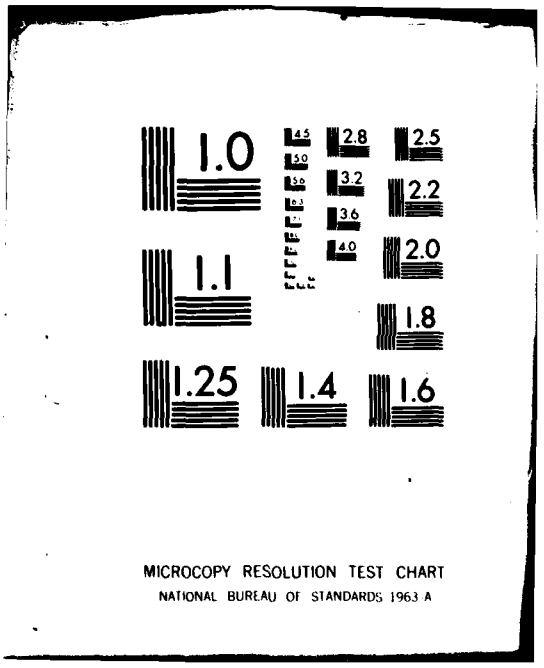
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR-1157	2. GOVT ACCESSION NO. AD-A092 779	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12830C LANCE Missile Number 2227 Round Number 356-DST		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
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18. SUPPLEMENTARY NOTES

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of the 12830C LANCE, Missile Number 2227, Round Number 356-DST, are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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INTRODUCTION

12830C LANCE, Missile Number 2227, Round Number 356-DST, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0917 MDT on 30 September 1980. The scheduled launch time was 0845 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 (°C), relative humidity, dew point (°C), density (gm/m³), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(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.

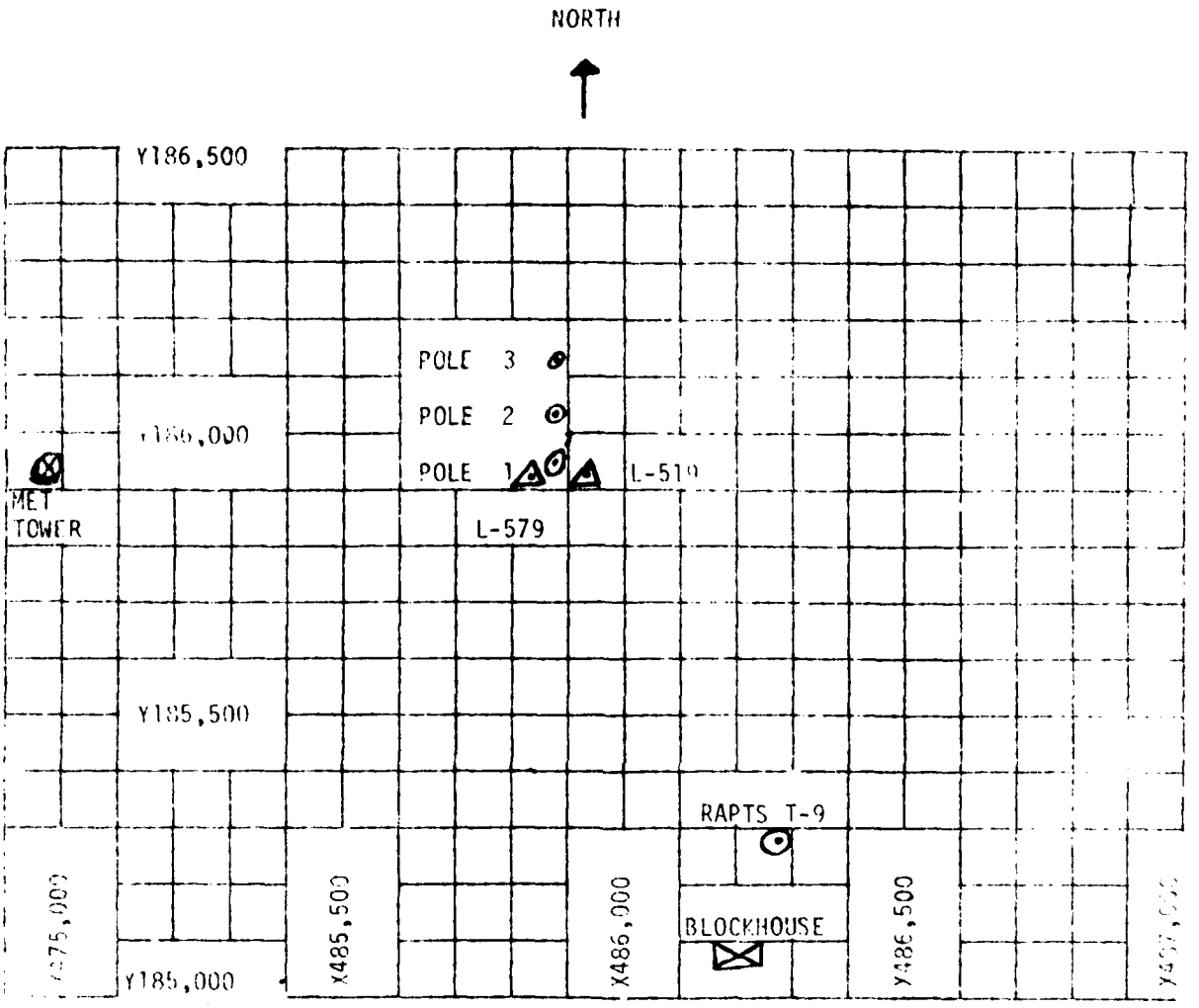
b. Upper Air

(1) Low level wind data were obtained from RAPIC T-9 pibal observation at:

SITE AND ALTITUDE	
LC-33	3000 METERS

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to as high as possible feet in 500-foot increments.

SITE AND TIME	
HMN	0745 MDT
WSD	0815 MDT
JAL	0850 MDT



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.

2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.

   (a) Pole #1 - 38.7 ft.

   (b) Pole #2 - 53.0 ft.

   (c) Pole #3 - 83.6 ft.

3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observations taken at 0915 MDT, 30 September 1980, at WSD, 12830C LANCE, Missile Number 2227, Round Number 356-DST.

ELEVATION	3990	FT/MSL
PRESSURE	844.9	MBS
TEMPERATURE	19.8	^{o}C
RELATIVE HUMIDITY	65	%
DEW POINT	13.0	^{o}C
DENSITY	1043	GM/M^3
WIND SPEED	05	KTS
WIND DIRECTION	020	DEGREES
CLOUD COVER	CLEAR	

TABLE 2. LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 83.7 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		
TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	009	03	-30	015	06	-30	MISSING	
-20	009	03	-20	018	05	-20	MISSING	
-10	009	03	-10	015	04	-10	MISSING	
0.0	009	03	0.0	013	03	0.0	MISSING	
+10	006	04	+10	015	06	+10	MISSING	

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
-30	015	06	-30	MISSING	
-20	012	06	-20	MISSING	
-10	015	06	-10	MISSING	
0.0	022	07	0.0	MISSING	
+10	015	06	+10	MISSING	

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
-30	360	05	-30	360	04
-20	360	04	-20	360	06
-10	360	04	-10	354	05
0.0	360	05	0.0	352	04
+10	360	05	+10	348	04

PILOT BALLOON MEASURED WIND DATA

TABLE 4.

RELEASED FROM LC-33 DATE 30 September 1980 TIME 0919 MDT

COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
sfc		calm
60	270	01
120	240	02
180	255	02
240	290	03
300	285	04
360	290	03
420	300	05
480	280	03
540	290	03
600	315	03
660	335	02
720	345	05
780	360	04
840	025	04
900	010	06
960	015	06
1020	025	07
1080	025	07
1140	020	09
1200	020	11
1260	020	09
1320	025	05
1380	015	07
1440	015	07
1500	010	08
1560	010	08
1620	015	09
1680	020	09
1740	020	09

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	025	09
1860	025	10
1920	025	10
1980	020	09
2040	020	09
2100	015	08
2160	015	07
2220	015	08
2280	360	08
2340	360	08
2400	360	08
2460	360	09
2520	360	10
2580	360	11
2640	360	12
2700	360	13
2760	360	08
2820	360	08
2880	005	08
2940	005	07
3000	005	12

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS

[illegible] ALTITUDE [illegible]
[illegible] 0815 MST
[illegible] 521

SIGNIFICANT LEVEL DATA
[illegible]
[illegible]

GEODETIC COORDINATES
32.49043 LAT DEG
106.37933 LON DEG

TABLE 5

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
884.0	3089.0	16.0	12.9	82.0
878.8	4154.7	18.0	11.3	65.0
875.0	4341.8	20.0	11.7	59.0
859.4	4787.7	20.8	9.7	49.0
850.0	5099.9	20.1	8.6	48.0
821.6	6062.6	19.7	7.4	45.0
794.0	7027.0	18.6	-2.5	24.0
766.2	8026.9	17.0	-8.1	20.0
700.0	10528.0	11.0	-11.7	19.0
660.4	12111.4	6.8	-8.7	32.0
643.0	12830.7	5.7	-12.3	26.0
618.0	13891.3	2.9	-14.7	26.0
605.0	14453.4	4.4	-19.2	16.0
577.4	15704.3	3.1	-21.0	15.0
561.4	16449.5	1.0	-22.7	15.0
537.6	17591.6	-.1	-24.3	14.0
500.0	19482.0	-5.1	-28.4	14.0
440.8	22606.4	-13.5	-35.2	14.0
426.4	23516.5	-14.2	-35.8	14.0
400.0	25101.4	-17.6	-36.5	14.0
358.6	27763.9	-22.2	-42.3	14.0
339.6	29081.5	-24.0	-43.2	15.0
300.0	32021.7	-30.5	-48.0	16.0
285.2	33193.5	-33.5	-50.0	17.0
250.0	36198.9	-40.6		
200.0	41071.0	-53.2		
195.2	41586.4	-53.5		
162.4	45405.1	-62.8		
150.0	47006.3	-66.0		
119.4	51493.9	-74.0		
111.6	52784.5	-73.6		
100.0	54905.9	-72.5		

[illegible] 5459.0 FEET [illegible]
[illegible] 0815 HRS MDT
[illegible]

SIGNIFICANT LEVEL DATA
[illegible]
[illegible]

GEODETIC COORDINATES
32.40033 LAT DEG
106.37033 LON DEG

TABLE 5 (continued)

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT
74.7	6970.1		-71.5	
70.1	6135.4		-69.4	
60.3	5092.2		-64.1	
50.6	6835.8		-62.0	
33.4	7702.8		-54.9	
30.0	7890.5		-55.3	
24.5	8336.7		-48.8	
20.0	8850.1		-48.5	
14.5	9524.4		-44.2	

[illegible] 5909.00 FT, [illegible]
[illegible] USS [illegible] MOD
[illegible] 521

[illegible] DATA
[illegible]
[illegible] DATA

GEODETIC COORDINATES
[illegible].40043 LAT DEG
[illegible].37035 LON DEG

TABLE 6

[illegible] ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3000.0	884.9	16.9	12.9	82.0	1058.2	664.6	20.0	2.9	1.000304
3500.0	865.7	16.1	12.8	88.9	1057.4	664.7	20.0	2.9	1.000303
4000.0	846.2	20.3	11.1	55.5	1024.7	663.3	30.0	4.4	1.000287
4500.0	826.9	20.3	9.1	49.3	1007.4	662.1	47.2	6.0	1.000275
5000.0	808.1	19.9	8.2	46.8	991.3	660.0	52.1	7.8	1.000269
5500.0	789.8	19.7	7.5	45.2	974.7	658.5	56.8	9.3	1.000263
6000.0	771.9	19.2	7.6	45.5	960.4	657.3	72.7	9.4	1.000249
6500.0	754.4	16.6	-2.0	28.6	946.5	656.3	86.7	10.2	1.000234
7000.0	737.4	17.8	-4.1	22.1	932.6	655.3	91.9	12.0	1.000228
7500.0	720.9	17.0	-6.0	20.1	918.9	654.3	95.4	13.5	1.000222
8000.0	704.8	15.9	-7.2	19.8	906.3	653.9	97.7	13.7	1.000218
8500.0	689.2	14.7	-8.3	19.6	893.9	651.5	99.4	14.0	1.000214
9000.0	674.0	13.5	-9.4	19.4	881.6	650.1	100.5	14.6	1.000210
9500.0	659.3	12.3	-10.5	19.2	869.6	650.6	99.1	14.7	1.000206
10000.0	644.7	11.1	-11.6	19.0	857.7	657.2	96.3	14.5	1.000203
10500.0	630.9	9.7	-10.4	22.9	845.9	655.8	89.3	14.8	1.000202
11000.0	617.4	8.4	-9.5	27.0	834.2	654.3	81.5	15.6	1.000200
11500.0	604.3	7.1	-8.4	31.1	822.6	652.8	73.2	18.7	1.000198
12000.0	591.5	6.2	-10.5	28.8	810.5	651.7	73.4	22.2	1.000194
12500.0	579.0	5.3	-12.7	26.0	798.4	650.5	81.1	24.6	1.000189
13000.0	566.9	4.9	-13.3	26.0	787.4	648.9	83.8	26.9	1.000186
13500.0	555.1	3.2	-15.4	24.1	775.0	648.0	85.8	21.5	1.000182
14000.0	543.5	4.4	-19.2	16.3	757.7	649.2	89.3	16.2	1.000175
14500.0	532.3	3.9	-20.0	15.6	745.0	648.6	95.0	11.9	1.000172
15000.0	521.3	3.3	-20.7	15.2	732.6	648.0	107.7	8.3	1.000169
15500.0	511.0	2.3	-21.5	15.0	721.7	646.8	107.2	11.7	1.000166
16000.0	500.3	1.6	-22.7	15.0	711.7	645.2	106.7	15.3	1.000163
16500.0	489.8	.5	-23.5	14.5	699.6	644.0	102.4	20.2	1.000160
17000.0	479.5	-.0	-24.2	14.1	687.6	644.0	99.9	24.8	1.000158
17500.0	469.2	-1.2	-25.2	14.0	677.5	642.7	98.7	28.0	1.000155
18000.0	459.2	-2.5	-26.3	14.0	667.9	641.1	97.8	30.5	1.000152
18500.0	449.3	-3.8	-27.3	14.0	658.5	639.5	96.7	31.0	1.000150

STATION ELEVATION 5999.00 FEET MSL
0815 HRS MDT

UPPER AIR DATA
27AUG2952I
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
14000.0	599.6	-5.1	-22.4	14.0	649.2	637.9	95.6	31.5	1.000148
15000.0	589.9	-6.5	-23.5	14.0	639.7	636.5	93.7	32.0	1.000145
16000.0	580.4	-7.8	-30.5	14.0	630.4	634.8	92.1	32.4	1.000143
17000.0	571.1	-9.1	-31.5	14.0	621.2	633.2	91.1	32.0	1.000141
18000.0	561.9	-10.4	-32.7	14.0	612.1	631.6	89.9	31.4	1.000138
19000.0	552.9	-11.7	-33.7	14.0	603.2	630.0	87.9	29.9	1.000136
20000.0	544.0	-13.0	-34.3	14.0	594.5	628.4	86.0	28.4	1.000134
21000.0	535.3	-13.8	-35.4	14.0	586.0	627.5	85.2	26.3	1.000132
22000.0	526.7	-14.2	-35.8	14.0	577.8	627.0	84.4	24.0	1.000129
23000.0	518.2	-15.2	-36.6	14.0	569.7	625.7	85.2	20.6	1.000127
24000.0	509.8	-16.3	-37.5	14.0	561.7	624.4	85.1	17.2	1.000125
25000.0	501.6	-17.4	-38.4	14.0	553.9	623.1	78.2	14.2	1.000123
26000.0	493.5	-18.5	-39.1	14.0	546.3	622.0	66.4	11.6	1.000121
27000.0	485.5	-19.1	-39.8	14.0	538.7	620.9	44.2	10.7	1.000119
28000.0	477.7	-20.0	-40.5	14.0	531.3	619.9	21.6	11.3	1.000117
29000.0	470.1	-20.9	-41.2	14.0	523.9	618.8	.8	12.1	1.000115
30000.0	462.6	-21.7	-41.9	14.0	516.7	617.8	343.7	14.3	1.000113
31000.0	455.2	-22.5	-42.5	14.2	509.6	616.8	320.5	17.6	1.000111
32000.0	447.9	-23.2	-42.8	14.6	502.6	615.8	306.3	22.7	1.000109
33000.0	440.7	-23.9	-43.1	14.9	495.7	614.8	301.6	24.3	1.000107
34000.0	433.7	-24.9	-43.4	15.1	488.9	613.8	298.1	25.7	1.000105
35000.0	426.7	-26.0	-44.7	15.3	482.2	612.8	300.3	24.4	1.000103
36000.0	419.9	-27.1	-45.5	15.5	475.6	611.8	302.6	23.6	1.000102
37000.0	413.2	-28.2	-46.3	15.7	469.1	610.7	304.4	25.5	1.000100
38000.0	406.7	-29.3	-47.1	15.8	462.7	609.7	305.8	27.2	1.000098
39000.0	400.3	-30.5	-48.0	16.0	456.4	608.6	306.5	27.5	1.000096
40000.0	394.0	-31.7	-48.8	16.4	450.2	607.5	307.0	27.7	1.000095
41000.0	387.8	-33.0	-49.7	16.9	444.2	606.4	305.9	28.0	1.000093
42000.0	381.8	-34.3	-51.5	15.3**	438.3	605.3	305.0	28.5	1.000092
43000.0	375.9	-35.8	-54.4	13.5**	432.4	604.2	304.9	29.7	1.000090
44000.0	370.1	-36.8	-57.2	12.0**	426.8	603.2	304.7	30.7	1.000089
45000.0	364.5	-37.8	-60.1	10.7**	421.3	602.1	304.4	30.7	1.000087

** SATURATION VAPOR PRESSURE EXCEEDED. DEWPOINT VALUE WAS OBTAINED BY INTERPOLATION.

STATION LETTERS [illegible]
[illegible] 0815 HRS MDT
AS [illegible]

UPPER AIR DATA
[illegible]
WHITE SANDS

TABLE 6 (continued)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37043 LON DEG

GEOPOTENTIAL ALTITUDE FEET MSL	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
35500.0	257.8	-38.9	-65.8	4.0**	383.4	596.2	304.0	31.0	1.000065
36000.0	252.2	-40.1	-75.1	1.1**	377.0	594.7	304.0	32.9	1.000064
36500.0	246.6	-41.4			370.6	593.1	303.5	34.2	1.000063
37000.0	241.0	-42.7			364.3	591.4	301.6	34.2	1.000061
37500.0	235.5	-44.0			358.0	589.8	299.0	33.6	1.000060
38000.0	230.2	-45.3			351.9	588.1	297.0	31.9	1.000078
38500.0	225.0	-46.6			345.9	586.4	295.0	31.1	1.000077
39000.0	219.9	-47.9			340.0	584.8	294.0	31.1	1.000076
39500.0	214.9	-49.1			334.2	583.1	294.0	30.8	1.000074
40000.0	210.1	-50.4			328.6	581.4	295.1	30.2	1.000073
40500.0	205.3	-51.7			323.0	579.7	295.8	29.6	1.000072
41000.0	200.7	-53.0			317.5	578.0	296.2	29.2	1.000071
41500.0	196.2	-53.4			310.8	577.4	295.8	28.8	1.000069
42000.0	191.3	-54.5			304.9	576.1	294.9	28.5	1.000068
42500.0	186.3	-55.7			299.3	574.4	295.9	28.3	1.000067
43000.0	182.3	-56.9			293.8	572.8	297.9	28.3	1.000065
43500.0	178.1	-58.2			288.4	571.2	299.4	29.2	1.000064
44000.0	173.8	-59.4			283.2	569.6	298.3	30.5	1.000063
44500.0	169.6	-60.6			278.0	568.0	299.4	30.7	1.000062
45000.0	165.5	-61.8			273.0	566.3	301.6	29.8	1.000061
45500.0	161.6	-63.0			267.9	564.8	303.9	28.9	1.000060
46000.0	157.7	-64.3			262.6	563.4	306.4	27.8	1.000058
46500.0	153.8	-65.9			257.4	562.1	307.3	27.5	1.000057
47000.0	150.0	-66.9			252.3	560.7	304.1	28.7	1.000056
47500.0	146.3	-68.1			247.0	559.5	301.9	29.9	1.000055
48000.0	142.6	-67.8			241.9	558.3	302.4	30.5	1.000054
48500.0	139.0	-63.7			236.8	557.1	302.9	31.0	1.000053
49000.0	135.5	-69.0			231.9	555.9	304.0	30.7	1.000052
49500.0	132.1	-70.3			227.0	554.6	305.2	30.3	1.000051
50000.0	128.8	-71.5			222.3	553.4	307.9	28.4	1.000050
50500.0	125.5	-72.2			217.7	552.2	311.1	26.6	1.000048
51000.0	122.3	-73.1			213.1	551.0	315.5	24.0	1.000047

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

0815 HRS MDT

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6 (continued)

ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TRU)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
51[illegible]	119.3	-74.0			203.7	549.8	323.2	21.7	1.000046
[illegible]	118.2	-73.9			203.3	549.9	329.8	19.7	1.000045
[illegible]	115.3	-73.3			198.0	550.0	337.5	18.0	1.000044
[illegible]	110.8	-73.7			192.7	550.2	341.0	16.3	1.000043
[illegible]	107.5	-73.4			187.5	550.7	342.9	14.6	1.000042
[illegible]	104.3	-73.1			182.5	551.1	345.4	13.2	1.000041
[illegible]	102.1	-72.7			177.5	551.5	348.5	12.0	1.000040
[illegible]	99.5	-72.5			172.8	551.9	355.3	11.3	1.000038
[illegible]	97.1	-72.4			168.3	552.0	5.3	11.1	1.000037
[illegible]	94.5	-72.3			164.0	552.1	15.4	10.6	1.000037
[illegible]	92.1	-72.2			159.7	552.2	26.0	9.0	1.000036
[illegible]	89.8	-72.1			155.6	552.3	43.6	8.1	1.000035
[illegible]	87.5	-72.1			151.6	552.5	48.6	8.9	1.000034
[illegible]	85.3	-72.1			147.7	552.6	52.8	9.8	1.000033
[illegible]	83.1	-71.9			143.9	552.7	53.0	10.5	1.000032
[illegible]	81.0	-71.8			140.2	552.8	52.8	11.1	1.000031
[illegible]	79.0	-71.7			136.5	552.9	53.0	11.4	1.000030
[illegible]	77.1	-71.6			133.0	553.0	53.6	11.5	1.000030
[illegible]	75.1	-71.5			129.6	553.2	56.6	11.8	1.000029
[illegible]	73.1	-71.3			126.0	553.9	59.6	12.5	1.000028
[illegible]	71.3	-70.8			122.2	555.2	58.8	13.1	1.000027
[illegible]	69.5	-69.1			118.5	556.4	60.9	13.3	1.000026
[illegible]	67.8	-68.5			115.2	557.5	63.0	13.4	1.000026
[illegible]	66.1	-67.9			111.9	558.8	63.5	13.1	1.000025
[illegible]	64.5	-67.6			108.7	559.8	63.4	12.7	1.000024
[illegible]	62.9	-67.7			105.6	561.1	70.7	12.1	1.000023
[illegible]	61.3	-64.3			102.5	562.3	71.8	11.0	1.000023
[illegible]	59.8	-64.1			99.6	563.5	73.0	9.9	1.000022
[illegible]	58.3	-63.9			97.1	563.7	73.8	9.6	1.000022
[illegible]	56.9	-63.9			94.6	564.1	73.9	9.4	1.000021
[illegible]	55.5	-63.2			92.2	564.5	74.9	9.4	1.000021
[illegible]	54.2	-62.9			89.8	564.9	74.4	9.8	1.000020

STATION ALTITUDE [illegible] FEET [illegible]
[illegible] 0815 PDS MST
[illegible]

UPPER AIR DATA
27APR[illegible]
[illegible]

GEODETIC COORDINATES
32.49043 LAT DEG
106.37033 LON DEG

TABLE 6 (continued)

GEOPOTENTIAL ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
67[illegible]00.0	52.9	-62.6			97.5	565.2	86.7	10.1	1.000019
68[illegible]00.0	51.6	-62.4			95.3	565.0	90.3	10.1	1.000019
69[illegible]00.0	50.3	-62.1			83.1	566.0	94.4	10.1	1.000018
69[illegible]00.0	49.1	-61.7			89.9	566.5	98.2	10.1	1.000018
69[illegible]00.1	48.0	-61.3			78.9	567.1	100.4	10.2	1.000018
70[illegible]00.6	46.8	-60.8			76.8	567.6	102.7	10.3	1.000017
70[illegible]00.0	45.7	-60.4			74.9	568.2	100.6	10.2	1.000017
71[illegible]00.0	44.6	-60.0			72.9	568.8	98.2	9.9	1.000016
71[illegible]00.0	43.6	-59.6			71.1	569.3	91.4	9.7	1.000016
72[illegible]00.0	42.5	-59.2			69.2	569.9	80.6	9.6	1.000015
72[illegible]00.0	41.5	-58.7			67.5	570.5	80.2	9.6	1.000015
73[illegible]00.0	40.5	-58.3			65.7	571.0	83.6	9.6	1.000015
73[illegible]00.0	39.6	-57.9			64.0	571.6	85.9	9.6	1.000014
74[illegible]00.0	38.6	-57.5			62.4	572.2	84.1	9.6	1.000014
74[illegible]00.0	37.7	-57.0			60.8	572.7	84.4	9.6	1.000014
75[illegible]00.0	36.8	-56.6			59.2	573.3	85.5	9.6	1.000013
75[illegible]00.0	35.9	-56.2			57.7	573.8	86.6	9.6	1.000013
75[illegible]00.0	35.1	-55.8			56.2	574.4	83.6	8.9	1.000013
76[illegible]00.0	34.3	-55.3			54.8	575.0	74.0	7.7	1.000012
77[illegible]00.0	33.4	-54.9			53.4	575.5	61.5	6.8	1.000012
77[illegible]00.0	32.7	-55.0			52.1	575.4	51.6	7.3	1.000012
78[illegible]00.0	31.9	-55.1			50.9	575.3	45.6	8.4	1.000011
78[illegible]00.0	31.1	-55.2			49.8	575.2	41.3	9.6	1.000011
79[illegible]00.0	30.4	-55.2			48.6	575.1	44.3	10.7	1.000011
79[illegible]00.0	29.7	-55.0			47.4	575.4	47.9	11.7	1.000011
80[illegible]00.0	29.0	-54.2			46.2	576.3	50.9	12.8	1.000010
80[illegible]00.0	28.4	-53.4			44.9	577.5	52.1	13.3	1.000010
81[illegible]00.0	27.7	-52.5			43.7	578.6	52.9	13.7	1.000010
81[illegible]00.0	27.1	-51.5			42.6	579.6	53.6	14.0	1.000009
82[illegible]00.0	26.4	-51.0			41.5	580.7	54.5	14.1	1.000009
82[illegible]00.0	25.8	-50.2			40.4	581.7	55.6	13.9	1.000009
83[illegible]00.0	25.2	-49.4			39.3	582.8	56.7	13.8	1.000009

0815 HRS MDT

TABLE 6 (continued)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOPOTENTIAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
33,000.0	24.7	-48.3			36.3	583.5	57.6	13.3	1.000009
34,000.0	24.1	-48.1			37.4	583.6	58.2	12.4	1.000008
35,000.0	23.5	-47.7			38.5	583.6	58.9	11.5	1.000008
36,000.0	23.1	-48.7			35.7	583.7	60.0	10.5	1.000008
37,000.0	22.5	-49.7			34.9	583.7	63.4	9.8	1.000008
38,000.0	22.0	-48.0			34.1	583.7	67.3	9.1	1.000008
39,000.0	21.5	-43.0			33.3	583.8	71.8	8.4	1.000007
40,000.0	21.0	-43.0			32.6	583.8	79.7	8.0	1.000007
41,000.0	20.5	-48.5			31.8	583.9	83.6	7.9	1.000007
42,000.0	20.0	-43.5			31.1	583.9	97.6	7.9	1.000007
43,000.0	19.6	-43.2			30.3	584.3	104.3	7.2	1.000007
44,000.0	19.2	-47.9			29.6	584.7	111.2	6.0	1.000007
45,000.0	18.7	-47.6			28.9	585.1	121.6	4.8	1.000006
46,000.0	18.3	-47.3			28.2	585.5	127.3	4.4	1.000006
47,000.0	17.9	-47.0			27.6	585.8	114.1	5.2	1.000006
48,000.0	17.5	-46.7			26.9	586.2	105.0	6.3	1.000006
49,000.0	17.1	-46.4			26.3	586.6	93.7	7.5	1.000006
50,000.0	16.7	-45.1			25.6	587.0	93.0	8.2	1.000006
51,000.0	16.3	-45.3			25.0	587.4	93.3	9.0	1.000006
52,000.0	15.9	-45.5			24.4	587.8	94.3	9.9	1.000005
53,000.0	15.6	-45.2			23.9	588.2			1.000005
54,000.0	15.3	-44.9			23.3	588.6			1.000005
55,000.0	14.9	-44.6			22.7	589.0			1.000005
56,000.0	14.6	-44.3			22.2	589.4			1.000005

STATION ALTITUDE [illegible] FT MSL
0815 RES MDT
ASCENT RATE [illegible]

MANDATORY LEVELS
27[illegible]21
[illegible]

GEODETIC COORDINATES
32.[illegible] LAT DEG
106.[illegible] LON DEG

TABLE 7

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL HUM	WIND DATA	
		AIR	DEWPOINT		DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE		PERCENT	DEGREES(TN)	KNOTS
[illegible]	5036.	20.1	8.8	48.	48.4	6.4
[illegible]	6609.	18.8	.3	29.	82.1	9.7
752.0	8615.	15.6	-7.4	20.	98.2	13.7
700.0	10517.	11.0	-11.7	19.	96.2	14.5
650.0	12526.	6.1	-10.8	28.	78.4	22.4
600.0	14663.	4.2	-19.5	16.	91.1	14.7
550.0	16969.	.5	-23.5	15.	102.3	20.0
500.0	19454.	-5.1	-23.4	14.	95.7	31.5
450.0	22134.	-12.1	-34.1	14.	87.2	29.5
400.0	25059.	-17.6	-38.5	14.	76.6	13.7
350.0	28303.	-23.0	-42.7	14.	310.0	21.0
300.0	31957.	-30.5	-48.0	10.	306.5	27.5
250.0	36118.	-40.6			304.0	33.5
200.0	40970.	-53.2			296.2	29.1
175.0	43760.	-59.0			298.4	30.1
150.0	46677.	-66.0			304.2	28.7
125.0	50451.	-72.4			311.7	26.3
100.0	54734.	-72.5			352.9	11.4
80.0	59045.	-71.8			53.0	11.4
70.0	61638.	-69.4			60.1	13.2
60.0	64695.	-64.1			72.7	10.1
50.0	68377.	-62.0			95.3	10.1
40.0	72947.	-58.1			83.9	9.6
30.0	78951.	-55.3			46.2	11.2
25.0	82392.	-49.1			57.0	13.7
20.0	87636.	-48.5			97.7	7.9
15.0	93300.	-44.7				

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

STATION ELEVATION [illegible] FEET MSL
[illegible]
[illegible]

0745 HRS MDT

SIGNIFICANT LEVEL DAT
2700010300
HOLLOMAN

GEODETIC COORDINATES
32.68865 LAT DEG
106.09965 LON DEG

TABLE 8.

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT	REL.HUM. PERCENT
[illegible].1	412[illegible].6	12.5	10.9	90.0
[illegible].0	4540.7	19.5	14.5	73.0
[illegible].[illegible]	5111.8	21.4	14.5	63.0
[illegible].2	5922.0	21.5	5.4	35.0
[illegible].[illegible]	6639.9	21.3	-.6	23.0
700.0	10561.3	11.0	-9.[illegible]	34.0
691.2	10725.6	6.4	-8.7	33.0
675.[illegible]	13680.3	4.5	-17.1	19.0
[illegible].2	14046.5	4.9	-20.[illegible]	14.0
662.6	14383.1	2.1	-23.4	13.0
654.2	16635.3	2.4	-23.[illegible]	13.0
600.0	19531.8	-5.1	-29.[illegible]	13.0
589.[illegible]	21537.0	-7.8	-31.0	13.0
441.[illegible]	22695.9	-12.3	-35.0	13.0
412.[illegible]	24014.8	-16.3	-37.5	14.0
400.5	25150.0	-18.1	-39.0	14.0
342.6	28017.0	-24.5	-44.[illegible]	14.0
305.0	32[illegible]4.3	-31.0	-49.0	14.0
25[illegible].[illegible]	35634.6	-38.6		
25[illegible].[illegible]	36[illegible]48.5	-39.2		
200.0	41135.0	-52.5		
153.4	45[illegible]45.9	-62.4		
150.[illegible]	47072.6	-65.5		
117.0	51065.3	-73.1		
113.0	51554.9	-74.1		
100.0	54[illegible]5.3	-72.[illegible]		
[illegible].[illegible]	55[illegible]3.5	-71.1		
75.3	60[illegible]5.0	-72.[illegible]		
70.[illegible]	61[illegible]4.7	-70.1		
53.[illegible]	[illegible].2	-61.7		
5[illegible].[illegible]	7[illegible]13.7	-56.4		
50.[illegible]	7[illegible]7[illegible].[illegible]	-54.[illegible]		

STATION ALTITUDE 8126.5 FEET SL
39 SHIP, AF 0745 HRS MDT
ASCENSION NO. 305

SIGNIFICANT LEVEL DATA
27 JUNE 1958
ROSCOMAN

GEODETIC COORDINATES
32.80865 LAT DEG
106.09965 LON DEG

TABLE 8 (continued)

PRESSURE MILLIBARS	GEOPOTENTIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT	REL.HUM. PERCENT
20.0	88064.5	-49.3		
10.0	103358.3	-42.2		

STATION ALTITUDE 4126.59 FEET MSL
0745 HRS MDT
ASCENSION NO. 300

UPPER AIR DATA
27400103C0
HOLLOMAN

TABLE 9.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOPOTENTIAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4126.6	880.1	12.5	10.9	90.0	1067.3	660.3	.0	.0	1.000299
4500.0	866.5	19.7	14.5	72.2	1025.7	669.1	119.5	1.0	1.000302
5000.0	853.3	21.5	14.6	64.7	1001.5	671.2	119.5	2.3	1.000296
5500.0	838.5	21.7	10.7	49.6	984.9	670.9	119.5	3.6	1.000276
6000.0	823.9	21.5	4.8	33.7	970.4	670.0	118.4	4.8	1.000254
6500.0	809.6	21.3	.7	25.3	954.8	669.5	112.0	5.7	1.000241
7000.0	795.3	20.4	-.9	24.0	941.3	668.3	105.6	6.1	1.000235
7500.0	781.2	19.0	-1.2	25.4	928.6	666.8	95.7	5.6	1.000232
8000.0	767.3	17.7	-1.6	26.8	916.5	665.3	87.1	6.0	1.000229
8500.0	753.7	16.4	-2.0	28.2	904.3	663.8	81.7	7.0	1.000225
9000.0	740.3	15.1	-2.5	29.6	892.3	662.3	78.5	7.4	1.000222
9500.0	727.1	13.8	-3.0	31.0	880.6	660.8	75.8	7.7	1.000219
10000.0	714.2	12.5	-3.6	32.4	868.9	659.2	67.8	7.9	1.000215
10500.0	701.5	11.2	-4.2	33.8	857.5	657.7	59.6	8.3	1.000212
11000.0	688.8	10.0	-5.2	33.7	845.6	656.3	50.2	9.3	1.000208
11500.0	676.2	8.8	-6.4	33.5	833.8	654.9	48.7	11.1	1.000204
12000.0	663.9	7.6	-7.5	33.3	822.1	653.4	57.8	14.1	1.000200
12500.0	651.8	6.5	-8.6	33.0	810.6	652.0	66.0	17.3	1.000196
13000.0	639.8	5.6	-11.8	27.2	798.4	650.9	73.2	20.7	1.000190
13500.0	628.6	4.8	-15.5	21.2	786.2	649.8	77.2	19.0	1.000184
14000.0	616.4	4.7	-18.3	16.9	772.2	649.0	81.6	16.0	1.000179
14500.0	605.0	4.8	-20.4	14.0	757.6	649.8	84.2	12.1	1.000175
15000.0	593.7	4.1	-21.2	13.7	745.5	648.9	89.1	9.3	1.000172
15500.0	582.7	3.4	-21.9	13.5	733.5	648.1	95.2	9.8	1.000169
16000.0	571.9	2.7	-22.7	13.2	721.7	647.3	101.6	12.7	1.000166
16500.0	561.2	2.1	-23.4	13.0	709.8	646.6	105.6	18.4	1.000163
17000.0	550.7	1.9	-23.5	13.0	697.0	646.4	106.9	23.0	1.000160
17500.0	540.3	.6	-24.6	13.0	687.3	644.7	107.5	27.1	1.000157
18000.0	530.1	-.8	-25.7	13.0	677.8	643.0	105.3	27.1	1.000155
18500.0	520.1	-2.2	-26.9	13.0	668.4	641.4	102.4	26.5	1.000152
19000.0	510.2	-3.6	-28.0	13.0	659.2	639.7	97.4	26.9	1.000150
19500.0	500.6	-5.0	-29.1	13.0	650.1	638.1	91.5	28.2	1.000148

STATION ALTITUDE 4126.59 FEET MSL
39 SEP. 87
ASCENSION NO. 358

0745 HRS MDT

UPPER AIR DATA
27909103G0
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
20000.0	491.7	-5.2	-30.0	13.0	640.4	636.7	84.9	30.9	1.000145
20500.0	481.5	-7.3	-30.9	13.0	630.8	635.5	80.8	32.3	1.000143
21000.0	472.1	-9.4	-31.9	13.0	621.1	633.9	77.4	33.3	1.000141
21500.0	462.9	-9.6	-32.3	13.0	611.7	632.6	77.6	31.3	1.000138
22000.0	453.9	-10.7	-33.7	13.0	602.3	631.2	78.3	29.1	1.000136
22500.0	445.0	-11.9	-34.6	13.0	593.2	629.8	79.5	28.0	1.000134
23000.0	436.3	-13.0	-35.4	13.2	584.0	628.4	80.7	27.1	1.000132
23500.0	427.6	-14.2	-36.1	13.5	575.0	627.0	81.2	27.0	1.000130
24000.0	419.1	-15.3	-36.9	13.8	566.2	625.6	82.0	27.0	1.000128
24500.0	410.8	-16.5	-37.7	14.0	557.5	624.2	83.7	27.3	1.000126
25000.0	402.5	-17.7	-38.6	14.0	548.9	622.7	86.5	27.2	1.000123
25500.0	394.4	-18.7	-39.4	14.0	539.8	621.5	91.2	26.8	1.000121
26000.0	386.3	-19.5	-40.1	14.0	530.6	620.5	94.0	24.3	1.000119
26500.0	378.5	-20.4	-40.8	14.0	521.5	619.4	94.6	19.2	1.000117
27000.0	370.7	-21.2	-41.5	14.0	512.6	618.4	88.2	13.6	1.000115
27500.0	363.2	-22.1	-42.2	14.0	503.9	617.3	63.9	8.7	1.000113
28000.0	355.8	-22.9	-42.9	14.0	495.3	616.3	22.3	7.0	1.000111
28500.0	348.5	-23.8	-43.6	14.0	486.9	615.2	347.3	8.9	1.000109
29000.0	341.4	-24.7	-44.4	14.0	478.6	614.1	326.8	12.6	1.000107
29500.0	334.5	-25.7	-45.2	14.0	470.5	612.9	313.7	17.2	1.000105
30000.0	327.5	-26.7	-46.1	14.0	462.6	611.6	308.5	21.9	1.000104
30500.0	320.4	-27.8	-46.9	14.0	454.9	610.3	305.7	26.4	1.000102
31000.0	313.7	-28.8	-47.6	14.0	447.3	609.0	304.0	28.4	1.000100
31500.0	307.2	-29.8	-48.3	14.0	439.8	607.7	302.7	30.2	1.000098
32000.0	300.8	-30.9	-49.5	14.0	432.4	606.4	302.6	31.4	1.000097
32500.0	294.5	-31.9	-51.5	12.3**	425.0	605.1	302.5	32.6	1.000095
33000.0	288.3	-33.0	-53.3	10.3**	417.7	603.7	304.2	33.6	1.000093
33500.0	281.8	-34.1	-56.3	8.4**	410.6	602.4	305.6	34.6	1.000092
34000.0	275.7	-35.1	-59.3	6.4**	403.5	601.1	306.0	35.2	1.000090
34500.0	269.8	-36.2	-62.9	4.4**	396.6	599.7	306.2	35.9	1.000088
35000.0	264.1	-37.3	-67.8	2.5**	389.8	598.4	304.1	36.5	1.000087
35500.0	258.5	-38.3	-78.7	.5**	383.2	597.0	302.1	37.2	1.000085

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

STATION ELEVATION 4120.59 FEET MSL
0745 HRS MDT
ASCENSION NO. 368

UPPER AIR DATA
27 JUL 1978
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOPOTENTIAL ALTITUDE FEET MSL	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
36000.0	252.7	-39.3			375.9	596.2	299.2	38.6	1.000064
36500.0	247.1	-39.9			369.0	595.0	298.5	40.1	1.000062
37000.0	241.5	-41.3			362.6	593.2	299.9	41.0	1.000061
37500.0	236.0	-42.6			356.7	591.5	299.7	41.8	1.000079
38000.0	230.7	-44.0			350.7	589.8	298.9	40.8	1.000078
38500.0	225.5	-45.3			344.9	588.0	300.2	39.9	1.000077
39000.0	220.4	-46.7			339.1	586.2	304.0	39.7	1.000076
39500.0	215.5	-48.1			333.5	584.5	306.9	39.6	1.000074
40000.0	210.6	-49.4			327.9	582.7	304.6	38.9	1.000073
40500.0	205.9	-50.8			322.5	581.0	302.1	38.4	1.000072
41000.0	201.2	-52.1			317.2	579.2	299.6	38.3	1.000071
41500.0	196.5	-53.4			311.5	577.6	297.0	38.2	1.000069
42000.0	191.9	-54.5			305.7	576.0	295.6	36.9	1.000068
42500.0	187.3	-55.7			300.1	574.5	294.1	35.7	1.000067
43000.0	182.9	-56.9			294.6	572.9	294.9	35.8	1.000066
43500.0	178.5	-58.1			289.2	571.4	296.0	36.1	1.000064
44000.0	174.3	-59.2			283.6	569.3	300.3	37.6	1.000063
44500.0	170.2	-60.4			278.6	568.2	304.1	39.2	1.000062
45000.0	166.1	-61.6			273.5	566.6	305.9	37.9	1.000061
45500.0	162.1	-62.7			268.4	565.2	307.9	36.6	1.000060
46000.0	158.2	-63.9			262.9	564.0	307.7	35.6	1.000059
46500.0	154.3	-64.5			257.6	562.3	307.4	34.6	1.000057
47000.0	150.5	-65.4			252.4	561.6	303.2	33.8	1.000056
47500.0	146.8	-66.2			247.0	560.5	298.6	33.2	1.000055
48000.0	143.1	-66.9			241.7	559.4	298.5	33.1	1.000054
48500.0	139.5	-67.7			236.6	558.4	299.1	33.2	1.000053
49000.0	136.0	-68.5			231.5	557.3	303.7	31.9	1.000052
49500.0	132.5	-69.3			226.6	556.3	309.9	30.5	1.000050
50000.0	129.3	-70.0			221.7	555.2	313.9	28.7	1.000049
50500.0	126.0	-70.8			217.0	554.1	316.7	26.6	1.000048
51000.0	122.9	-71.6			212.4	553.1	319.3	24.4	1.000047
51500.0	119.8	-72.4			207.9	552.0	320.5	22.2	1.000046

STATION ALTITUDE 4126.53 FEET MSL
30 SEP 81
ASCENSION NO. 369

0745 HRS MDT

UPPER AIR DATA
27400193E0
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
52000.0	115.8	-73.1			203.4	551.0	321.8	19.9	1.000045
52500.0	113.8	-73.5			198.6	550.4	319.3	15.1	1.000044
53000.0	110.9	-74.0			193.9	549.8	314.6	10.4	1.000043
53500.0	108.1	-73.8			188.8	550.0	319.6	8.4	1.000042
54000.0	105.3	-73.4			183.6	550.6	328.5	6.6	1.000041
54500.0	102.6	-73.0			178.6	551.2	341.8	7.4	1.000040
55000.0	100.0	-72.6			173.7	551.7	351.5	9.0	1.000039
55500.0	97.4	-72.4			169.1	552.0	.5	10.0	1.000038
56000.0	95.0	-72.1			164.6	552.4	9.7	10.8	1.000037
56500.0	92.6	-71.9			160.2	552.7	17.3	11.7	1.000036
57000.0	90.2	-71.7			156.0	553.0	23.5	12.2	1.000035
57500.0	87.9	-71.4			151.8	553.3	29.3	12.7	1.000034
58000.0	85.7	-71.2			147.6	553.6	30.4	12.2	1.000033
58500.0	83.5	-71.3			144.2	553.5	30.3	11.4	1.000032
59000.0	81.4	-71.7			140.8	553.0	31.5	10.9	1.000031
59500.0	79.3	-72.1			137.4	552.5	34.1	10.9	1.000031
60000.0	77.3	-72.4			134.2	552.0	36.8	11.0	1.000030
60500.0	75.4	-72.8			131.0	551.4	40.0	10.9	1.000029
61000.0	73.5	-71.9			127.1	552.7	43.2	10.9	1.000028
61500.0	71.6	-70.9			123.3	554.0	47.9	10.6	1.000027
62000.0	69.8	-70.0			119.7	555.2	53.2	10.4	1.000027
62500.0	68.1	-69.4			116.4	556.1	56.0	10.4	1.000026
63000.0	66.4	-68.8			113.2	556.9	59.2	10.6	1.000025
63500.0	64.8	-68.2			110.0	557.8	64.5	10.7	1.000024
64000.0	63.2	-67.5			107.0	558.6	64.8	10.8	1.000024
64500.0	61.6	-66.9			104.1	559.5	65.3	10.8	1.000023
65000.0	60.1	-66.3			101.2	560.3	67.5	10.8	1.000023
65500.0	58.6	-65.7			98.4	561.2	69.6	10.7	1.000022
66000.0	57.2	-65.0			95.7	562.0	69.6	10.7	1.000021
66500.0	55.8	-64.4			93.1	562.8	72.9	10.7	1.000021
67000.0	54.4	-63.8			90.5	563.7	75.5	10.6	1.000020
67500.0	53.0	-63.2			88.0	564.5	78.3	10.7	1.000020

STATION ALTITUDE 5126.59 FEET MSL
30 SEP 83 0745 HRS MDT
ASCENSION NO. 361

UPPER AIR DATA
2740010360
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOPOTENTIAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
65000.0	51.7	-62.6			85.6	565.4	81.9	11.1	1.000019
66000.0	50.5	-61.9			83.2	566.2	85.1	11.5	1.000019
67000.0	49.2	-61.3			81.0	567.0	92.5	12.0	1.000018
68000.0	48.1	-60.8			78.9	567.7	101.4	12.6	1.000018
69000.0	46.9	-60.2			76.8	568.5	109.3	13.5	1.000017
70000.0	45.8	-59.7			74.7	569.2	110.9	11.8	1.000017
71000.0	44.7	-59.1			72.8	570.0	113.1	10.2	1.000016
72000.0	43.7	-58.5			70.9	570.7	110.6	8.5	1.000016
73000.0	42.6	-58.0			69.0	571.5	92.6	7.2	1.000015
74000.0	41.6	-57.4			67.2	572.2	69.9	6.8	1.000015
75000.0	40.6	-56.9			65.4	572.9	57.6	7.4	1.000015
76000.0	39.6	-56.4			63.7	573.6	58.0	8.1	1.000014
77000.0	38.7	-56.2			62.2	573.8	58.4	8.9	1.000014
78000.0	37.8	-56.1			60.7	574.0	60.9	9.1	1.000014
79000.0	36.9	-55.9			59.2	574.2	65.6	8.9	1.000013
80000.0	36.0	-55.8			57.8	574.4	70.3	8.8	1.000013
81000.0	35.2	-55.6			56.4	574.6	69.5	9.0	1.000013
82000.0	34.4	-55.5			55.0	574.8	55.6	9.5	1.000012
83000.0	33.6	-55.3			53.7	575.0	47.0	10.3	1.000012
84000.0	32.8	-55.2			52.4	575.2	44.3	11.0	1.000012
85000.0	32.0	-55.0			51.1	575.4	45.9	11.7	1.000011
86000.0	31.3	-54.9			49.9	575.6	48.5	12.3	1.000011
87000.0	30.5	-54.7			48.7	575.8	47.6	12.2	1.000011
88000.0	29.8	-54.5			47.5	576.0	54.2	11.9	1.000011
89000.0	29.1	-54.3			46.4	576.4	61.0	11.8	1.000010
90000.0	28.5	-53.9			45.2	576.8	65.1	11.8	1.000010
91000.0	27.8	-53.6			44.1	577.2	68.6	11.8	1.000010
92000.0	27.2	-53.3			43.0	577.6	68.0	11.9	1.000010
93000.0	26.5	-53.0			42.0	578.0	69.4	11.9	1.000009
94000.0	25.9	-52.7			41.0	578.4	70.6	11.8	1.000009
95000.0	25.3	-52.4			40.0	578.8	71.8	11.7	1.000009
96000.0	24.7	-52.1			39.0	579.2	73.3	11.5	1.000009

STATION ALTITUDE 4126.59 FEET MSL
30 SEP 79 0745 HRS MDT
ASCENSION NO. 360

UPPER AIR DATA
2740010360
HOLLOMAN

GEODETIC COORDINATES
32.86865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	24.2	-51.8			38.0	579.6	76.2	10.9	1.000008
84500.0	23.6	-51.5			37.1	580.0	79.4	10.4	1.000008
85000.0	23.1	-51.2			36.2	580.4	83.0	9.8	1.000008
85500.0	22.5	-50.9			35.3	580.8	84.1	9.7	1.000008
86000.0	22.0	-50.6			34.5	581.2	84.9	9.5	1.000008
86500.0	21.5	-50.3			33.6	581.6	85.8	9.3	1.000007
87000.0	21.0	-49.9			32.8	582.0	84.6	9.1	1.000007
87500.0	20.5	-49.6			32.0	582.4	82.4	8.8	1.000007
88000.0	20.1	-49.3			31.2	582.8	80.2	8.5	1.000007
88500.0	19.6	-49.1			30.5	583.1	78.9	8.1	1.000007
89000.0	19.2	-48.9			29.8	583.4	72.2	7.6	1.000007
89500.0	18.7	-48.6			29.1	583.7	66.9	7.1	1.000006
90000.0	18.3	-48.4			28.4	584.0	68.9	6.7	1.000006
90500.0	17.9	-48.2			27.7	584.3	56.6	6.6	1.000006
91000.0	17.5	-47.9			27.1	584.6	53.7	6.7	1.000006
91500.0	17.1	-47.7			26.4	584.9	50.9	6.8	1.000006
92000.0	16.7	-47.5			25.8	585.2	48.2	6.9	1.000006
92500.0	16.4	-47.2			25.2	585.5	51.9	6.7	1.000006
93000.0	16.0	-47.0			24.6	585.8	58.5	6.4	1.000005
93500.0	15.6	-46.9			24.1	586.1	65.4	6.1	1.000005
94000.0	15.3	-46.5			23.5	586.4	72.9	6.0	1.000005
94500.0	14.9	-46.3			22.9	586.7	78.9	5.5	1.000005
95000.0	14.6	-46.1			22.4	587.0	85.7	5.0	1.000005
95500.0	14.3	-45.8			21.9	587.3	93.9	4.6	1.000005
96000.0	14.0	-45.6			21.4	587.6	103.4	4.3	1.000005
96500.0	13.6	-45.4			20.9	587.9	85.9	3.3	1.000005
97000.0	13.3	-45.2			20.4	588.2	57.3	2.7	1.000005
97500.0	13.0	-44.9			19.9	588.5	20.6	3.1	1.000004
98000.0	12.7	-44.7			19.4	588.8	5.9	3.9	1.000004
98500.0	12.5	-44.5			19.0	589.1	351.3	4.6	1.000004
99000.0	12.2	-44.2			18.5	589.4	340.7	5.4	1.000004
99500.0	11.9	-44.0			18.1	589.7	333.3	6.4	1.000004

STATION ALTITUDE 4126.59 FEET MSL
0745 HRS MDT

UPPER AIR DATA
27 09 10 360

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 9 (continued)

GEOPOTENTIAL ALTITUDE FEET MSL	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
100000.0	11.6	-43.4			17.7	590.0			1.000004
101000.0	11.4	-43.5			17.3	590.3			1.000004
101000.0	11.1	-43.3			16.9	590.6			1.000004
101000.0	10.9	-43.1			16.5	590.9			1.000004
102000.0	10.6	-42.8			16.1	591.2			1.000004
102000.0	10.4	-42.6			15.7	591.5			1.000003
103000.0	10.2	-42.4			15.3	591.8			1.000003

STATION ALTITUDE 4126.59 FEET MSL
30 SEP 89 0745 HRS MDT
ASCENSION NO. 369

MANDATORY LEVELS
2740010360
HOLLOMAN

GEODETIC COORDINATES
32.86865 LAT DEG
106.09965 LON DEG

TABLE 10.

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	5108.	21.9	14.5	63.	119.5	2.6
800.0	6833.	20.8	-.8	24.	108.5	6.3
750.0	8646.	16.1	-2.1	29.	80.5	7.3
700.0	10551.	11.0	-4.2	34.	58.4	8.4
650.0	12562.	6.3	-9.0	32.	67.2	17.7
600.0	14705.	4.5	-20.7	14.	85.9	10.4
550.0	17015.	1.8	-23.6	13.	107.0	23.3
500.0	19564.	-5.1	-29.2	13.	91.2	28.3
450.0	22197.	-11.2	-34.1	13.	78.8	28.6
400.0	25114.	-18.1	-39.0	14.	87.8	27.1
350.0	28352.	-23.6	-43.5	14.	353.5	8.2
300.0	31995.	-31.0	-49.6	14.	302.5	31.5
250.0	36161.	-39.2			298.0	39.2
200.0	41035.	-52.5			299.0	38.2
175.0	43835.	-59.0			299.6	37.4
150.0	46965.	-65.5			302.7	33.7
125.0	50535.	-71.1			317.8	25.9
100.0	54826.	-72.6			351.0	8.9
80.0	59144.	-71.9			33.1	10.9
70.0	61727.	-70.1			52.3	10.4
60.0	64763.	-66.3			57.1	10.8
50.0	68428.	-61.7			86.1	11.7
40.0	73018.	-56.5			57.0	7.8
30.0	79035.	-54.6			52.0	12.0
25.0	82885.	-52.2			72.4	11.6
20.0	87654.	-49.3			80.1	8.5
15.0	93383.	-46.4			76.6	5.7
10.0	102801.	-42.2				

[illegible] FEET MSL
[illegible]
0850 HRS MDT

SIGNIFICANT LEVEL DATA
27[illegible]
JALLEN

GEODETIC COORDINATES
33.1071[illegible] LAT DEG
106.49511 LON DEG

TABLE 11.

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE METERS OR FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT
862.4	4351.0	17.1	8.6	78.0
853.6	4664.6	20.6	7.7	45.0
850.0	5107.5	19.8	8.2	41.0
700.8	9333.3	13.4	-4.6	19.0
700.0	10529.9	10.3	-6.5	30.0
650.3	12339.2	5.6	-9.0	34.0
616.0	13961.8	3.0	-19.1	17.0
600.4	14393.5	4.3	-22.3	12.0
584.0	15396.4	2.6	-24.9	11.0
558.4	16586.5	2.3	-26.1	10.0
500.0	19476.6	-5.5	-32.2	10.0
466.2	21267.0	-8.7	-34.6	11.0
453.8	21950.8	-10.0	-36.2	10.0
400.0	25097.6	-18.2	-42.2	10.0
386.1	25962.7	-20.0	-43.2	11.0
369.0	27618.2	-23.0	-45.2	11.0
331.8	29607.0	-27.5	-48.0	11.0
300.0	31375.2	-31.4		
250.0	35146.7	-49.6		
200.0	41114.2	-53.5		
150.0	45157.8	-62.4		
100.0	46041.1	-66.5		
143.0	47831.9	-67.0		
124.8	50509.1	-71.5		
117.4	55477.2	-73.6		
100.0	56262.6	-71.1		
70.0	61852.4	-69.8		
50.0	66605.2	-61.6		
42.4	72016.7	-57.0		
30.0	73254.0	-56.7		

STATION ALTITUDE 4951.00 FEET ASL
30 SEP. 82 0850 HRS MDT
ASCENSION NO. 267

UPPER AIR DATA
2709830267
JALLEN

TABLE 12.

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOPOTENTIAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4951.0	862.4	17.1	8.8	58.0	1053.9	665.3	0	0	1.000286
5000.0	858.5	19.2	8.1	48.5	1029.9	667.7	87.3	0	1.000277
5500.0	853.2	19.8	5.6	42.0	1010.1	668.3	87.3	1.7	1.000268
6000.0	838.3	19.7	4.3	36.3	993.4	668.0	87.3	2.6	1.000258
6500.0	823.6	19.6	1.7	30.2	976.9	667.6	101.5	3.2	1.000248
6900.0	809.1	19.5	-1.5	24.2	960.7	667.3	115.9	4.0	1.000238
7000.0	794.9	19.2	-4.8	19.2	945.2	666.8	120.0	4.4	1.000230
7500.0	780.7	18.8	-4.8	20.7	932.3	665.4	124.2	4.7	1.000227
8000.0	766.8	18.7	-4.9	22.3	919.6	663.9	129.9	4.8	1.000224
8500.0	753.1	15.4	-5.1	23.8	907.2	662.5	133.2	4.9	1.000221
9000.0	739.6	14.2	-5.4	25.3	894.9	661.0	134.9	5.0	1.000218
9500.0	726.4	12.9	-5.7	26.9	882.8	659.6	122.7	4.2	1.000215
10000.0	713.5	11.6	-6.1	28.4	871.0	658.1	98.9	3.6	1.000212
10500.0	700.8	10.4	-6.5	29.9	859.3	656.6	60.1	4.0	1.000209
11000.0	688.3	9.1	-7.1	31.0	847.5	655.1	42.6	6.3	1.000206
11500.0	676.1	7.8	-7.8	32.1	835.9	653.6	37.0	9.1	1.000203
12000.0	664.1	6.5	-8.5	33.3	824.5	652.1	52.5	11.6	1.000199
12500.0	652.3	5.4	-9.9	32.2	812.7	650.7	65.8	14.0	1.000195
13000.0	640.8	4.7	-12.8	26.6	799.8	649.9	77.3	13.3	1.000189
13500.0	629.3	4.1	-16.2	21.0	787.1	649.0	87.7	12.3	1.000184
14000.0	618.4	3.8	-19.9	15.7	773.6	648.6	95.5	10.4	1.000179
14500.0	607.3	4.1	-22.8	11.9	758.4	648.9	97.8	9.7	1.000174
15000.0	596.8	3.3	-23.9	11.4	746.6	647.9	98.5	9.4	1.000171
15500.0	586.7	2.6	-25.0	10.9	734.6	647.1	102.6	11.7	1.000168
16000.0	576.9	2.4	-25.5	10.5	721.2	646.9	106.3	14.4	1.000164
16500.0	567.2	2.3	-26.0	10.1	708.1	646.8	109.9	17.7	1.000161
17000.0	557.6	1.2	-27.0	10.0	697.7	645.4	113.4	20.0	1.000159
17500.0	548.2	-0.2	-28.0	10.0	687.9	643.8	116.8	21.8	1.000156
18000.0	539.0	-1.5	-29.1	10.0	678.2	642.2	115.6	22.6	1.000154
18500.0	529.9	-2.9	-30.2	10.0	668.7	640.6	113.6	23.2	1.000152
19000.0	521.0	-4.2	-31.2	10.0	659.4	639.0	109.1	23.2	1.000149
19500.0	512.3	-5.6	-32.2	10.0	650.1	637.4	105.1	23.5	1.000147

[illegible] 0850 HRS MDT

UPPER AIR DATA
27[illegible]
GALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 12 (continued)

SELECTED ALTITUDE ABOVE SEA LEVEL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TRU)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
[illegible]00.0	888.9	-6.7	-32.9	10.3	640.4	650.0	94.9	24.6	1.000145
[illegible]00.0	880.8	-7.3	-33.5	10.0	634.6	648.0	86.1	26.9	1.000142
[illegible]00.0	871.1	-9.1	-34.2	10.9	627.3	645.2	73.1	30.1	1.000140
[illegible]00.0	861.4	-10.3	-35.1	10.7	619.4	642.0	73.0	32.4	1.000138
[illegible]00.0	852.9	-10.7	-36.3	10.9	611.4	639.2	70.3	33.7	1.000135
[illegible]00.0	843.9	-11.9	-37.3	10.0	603.1	636.2	72.4	32.3	1.000133
[illegible]00.0	835.1	-13.1	-38.2	10.0	594.9	633.7	72.4	32.3	1.000133
[illegible]00.0	826.5	-13.1	-38.2	10.0	586.8	630.5	77.0	30.7	1.000131
[illegible]00.0	818.0	-14.5	-39.2	10.0	578.9	628.8	84.0	29.1	1.000129
[illegible]00.0	810.0	-15.5	-40.1	10.0	571.2	626.5	87.5	28.6	1.000127
[illegible]00.0	801.7	-16.3	-41.1	10.0	563.6	623.9	90.6	28.2	1.000125
[illegible]00.0	793.6	-16.8	-42.0	10.0	556.1	622.4	94.6	27.4	1.000123
[illegible]00.0	785.5	-17.5	-42.7	10.5	548.9	620.7	93.5	26.2	1.000121
[illegible]00.0	777.5	-20.7	-43.5	11.0	541.8	619.1	101.4	23.9	1.000119
[illegible]00.0	769.6	-21.4	-43.9	11.0	534.5	618.2	98.7	20.8	1.000117
[illegible]00.0	761.9	-22.1	-44.5	11.0	527.3	617.3	98.6	17.4	1.000115
[illegible]00.0	754.4	-22.8	-45.0	11.0	520.2	616.4	78.2	15.5	1.000113
[illegible]00.0	746.9	-23.9	-45.9	11.0	513.2	615.1	83.2	14.8	1.000111
[illegible]00.0	739.5	-25.0	-46.8	11.0	506.3	613.7	85.0	13.8	1.000109
[illegible]00.0	732.3	-26.1	-47.7	11.0	499.4	612.3	83.5	12.9	1.000107
[illegible]00.0	725.3	-27.3	-48.6	11.0	492.6	610.9	32.9	10.6	1.000106
[illegible]00.0	718.3	-28.1	-59.9	9.2**	485.9	609.8	9.2	9.5	1.000104
[illegible]00.0	711.4	-29.0	-54.9	6.9**	479.2	608.8	356.9	11.4	1.000102
[illegible]00.0	704.7	-29.8	-57.9	4.5**	472.6	607.7	313.1	14.8	1.000100
[illegible]00.0	698.1	-30.6	-60.0	2.2**	466.1	606.7	305.1	18.8	1.000098
[illegible]00.0	691.7	-31.5			459.7	605.7	298.9	22.9	1.000096
[illegible]00.0	685.3	-32.6			453.5	604.3	294.9	26.6	1.000095
[illegible]00.0	679.1	-33.7			447.3	602.9	291.9	29.3	1.000093
[illegible]00.0	673.1	-34.5			441.1	601.5	289.9	31.5	1.000091
[illegible]00.0	667.1	-35.9			435.1	600.1	288.4	33.4	1.000090
[illegible]00.0	661.3	-37.1			429.3	598.7	287.5	35.2	1.000088
[illegible]00.0	655.6	-38.1			423.5	597.3	286.7	36.9	1.000087
[illegible]00.0	650.0	-39.3			418.0	595.9	286.3	38.6	1.000085

** [illegible] ESTIMATED VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
0850 HRS MDT
ASCENSION NO. 207

UPPER AIR DATA
27400302G7
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 12 (continued)

GEOPOTENTIAL ALTITUDE FEET MSL	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TRU)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
36000.0	251.6	-40.3			376.4	594.5	296.1	39.0	1.000064
36500.0	246.3	-41.5			370.0	592.9	294.9	39.4	1.000062
37000.0	240.9	-42.9			363.7	591.2	293.7	39.9	1.000061
37500.0	235.6	-44.2			357.5	589.5	293.3	40.3	1.000060
38000.0	229.5	-45.5			351.4	587.8	293.3	40.2	1.000078
38500.0	224.4	-46.8			345.5	586.1	297.6	39.9	1.000077
39000.0	219.3	-48.2			339.6	584.4	300.7	39.4	1.000076
39500.0	214.4	-49.5			333.9	582.6	301.9	38.5	1.000074
40000.0	209.5	-50.8			328.3	580.9	300.8	37.0	1.000073
40500.0	204.8	-52.1			322.8	579.2	299.2	36.0	1.000072
41000.0	200.1	-53.5			317.4	577.4	297.1	35.6	1.000071
41500.0	195.4	-54.5			311.3	576.0	297.5	35.4	1.000069
42000.0	190.7	-55.6			305.4	574.6	300.6	35.3	1.000068
42500.0	186.2	-56.7			299.6	573.2	303.5	34.9	1.000067
43000.0	181.8	-57.7			294.0	571.8	305.7	34.3	1.000065
43500.0	177.4	-58.3			288.4	570.4	306.5	34.0	1.000064
44000.0	173.2	-59.9			282.9	568.9	305.1	34.2	1.000063
44500.0	169.1	-60.9			277.6	567.5	304.2	34.4	1.000062
45000.0	165.1	-62.0			272.4	566.1	303.8	34.4	1.000061
45500.0	161.1	-63.0			267.0	564.8	303.6	34.3	1.000059
46000.0	157.2	-63.8			261.6	563.6	303.7	33.9	1.000058
46500.0	153.3	-64.7			256.2	562.4	303.6	33.5	1.000057
47000.0	149.5	-65.6			251.1	561.2	302.4	33.4	1.000056
47500.0	145.9	-66.3			246.2	559.9	301.4	33.2	1.000055
48000.0	142.2	-67.3			241.3	558.2	303.1	32.8	1.000054
48500.0	138.7	-68.3			236.2	557.2	304.8	32.4	1.000053
49000.0	135.2	-69.4			231.1	556.1	307.6	31.1	1.000051
49500.0	131.8	-70.2			226.1	555.1	310.6	29.9	1.000050
50000.0	128.5	-70.9			221.3	554.0	312.5	28.3	1.000049
50500.0	125.2	-71.7			216.6	553.0	313.8	26.5	1.000048
51000.0	122.1	-72.1			211.5	552.4	314.6	24.2	1.000047
51500.0	119.0	-72.4			206.4	552.0	314.6	21.3	1.000046

[illegible] 0850 HRS MDT

[illegible] 27 09 31 257
[illegible]

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

TABLE 12 (continued)

[illegible] ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEW POINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
[illegible].0	11[illegible].0	-72.7			291.4	551.6	314.4	18.3	1.000045
[illegible].0	11[illegible].1	-73.1			1[illegible].5	551.2	314.0	15.1	1.000044
[illegible].0	119.1	-73.5			191.9	550.7	317.5	12.6	1.000043
[illegible].0	117.5	-73.5			187.2	550.4	330.5	12.1	1.000042
[illegible].0	113.5	-72.7			181.7	551.6	342.5	11.9	1.000040
[illegible].0	101.9	-71.8			176.2	552.9	350.4	11.4	1.000039
[illegible].0	[illegible].5	-71.1			171.2	553.8	353.6	10.9	1.000038
[illegible].0	[illegible].4	-71.0			166.8	553.9	1.9	8.8	1.000037
[illegible].0	94.4	-70.9			162.5	554.1	7.1	6.8	1.000036
[illegible].0	92.5	-70.3			158.4	554.2	16.6	6.4	1.000035
[illegible].0	89.7	-70.7			154.3	554.3	27.2	6.3	1.000034
[illegible].0	87.4	-70.6			150.3	554.4	35.2	6.7	1.000033
[illegible].0	85.2	-70.5			146.5	554.6	41.5	7.1	1.000033
[illegible].0	83.1	-70.4			142.7	554.7	46.1	7.6	1.000032
[illegible].0	81.0	-70.5			139.1	554.8	49.3	8.1	1.000031
[illegible].0	79.0	-70.2			135.5	554.9	52.0	8.6	1.000030
[illegible].0	76.9	-70.1			132.0	555.1	53.8	9.3	1.000029
[illegible].0	75.0	-70.1			128.6	555.2	55.0	10.0	1.000029
[illegible].0	73.1	-70.0			125.3	555.3	55.7	10.5	1.000028
[illegible].0	71.3	-69.9			122.1	555.5	56.5	10.9	1.000027
[illegible].0	69.5	-69.8			119.0	555.8	57.4	11.1	1.000026
[illegible].0	67.8	-69.8			115.7	556.0	58.0	11.3	1.000026
[illegible].0	66.1	-68.4			112.5	557.4	58.6	11.3	1.000025
[illegible].0	64.5	-67.1			109.4	558.3	59.5	11.2	1.000024
[illegible].0	62.9	-67.2			106.4	559.1	62.2	11.2	1.000024
[illegible].0	61.3	-66.6			103.5	559.9	64.6	11.0	1.000023
[illegible].0	59.8	-66.3			100.6	560.7	67.0	10.7	1.000022
[illegible].0	58.4	-65.4			97.9	561.6	69.6	10.6	1.000022
[illegible].0	56.9	-64.5			95.2	562.4	69.5	10.6	1.000021
[illegible].0	55.5	-64.2			92.6	563.2	69.8	10.7	1.000021
[illegible].0	54.2	-63.7			90.0	564.0	70.5	10.6	1.000020
[illegible].0	52.9	-62.9			87.5	564.8	71.0	10.5	1.000019

STATION ALTITUDE 6531.00 FEET MSL
30 SEP 83 0850 HRS MDT
ASCENSION NO. 267

UPPER AIR DATA
27400302C7
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 12 (continued)

GEOPOTENTIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
63000.0	51.5	-62.3			85.2	565.0	89.5	10.7	1.000019
64000.0	50.3	-61.7			82.8	566.5	99.4	11.2	1.000018
65000.0	49.1	-61.2			80.6	567.2	108.9	11.8	1.000018
66000.0	47.9	-60.6			78.5	567.9	116.5	10.5	1.000017
67000.0	46.7	-60.1			76.4	568.7	126.0	9.5	1.000017
68000.0	45.6	-59.5			74.4	569.4	128.4	7.3	1.000017
69000.0	44.5	-59.0			72.4	570.1	119.2	4.2	1.000016
70000.0	43.5	-58.5			70.5	570.8	74.6	1.7	1.000016
71000.0	42.4	-57.9			68.7	571.6	39.4	4.7	1.000015
72000.0	41.4	-57.8			67.0	571.8	32.5	8.0	1.000015
73000.0	40.4	-57.6			65.4	572.0	37.1	10.7	1.000015
74000.0	39.5	-57.4			63.8	572.2	48.7	12.9	1.000014
75000.0	38.6	-57.3			62.2	572.4	56.8	15.4	1.000014
76000.0	37.7	-57.1			60.7	572.6	62.0	14.9	1.000014
77000.0	36.8	-57.0			59.2	572.8	67.5	14.0	1.000013
78000.0	35.9	-56.8			57.8	573.0	73.1	13.1	1.000013
79000.0	35.0	-56.7			56.4	573.2	77.6	11.6	1.000013
80000.0	34.2	-56.5			55.0	573.4	83.3	10.3	1.000012
81000.0	33.4	-56.4			53.7	573.6			1.000012
82000.0	32.6	-56.2			52.4	573.8			1.000012
83000.0	31.9	-56.1			51.1	574.0			1.000011
84000.0	31.1	-55.9			49.9	574.2			1.000011
85000.0	30.4	-55.8			48.7	574.4			1.000011

STATION ELEVATION 6651.00 FEET MSL
0850 HRS MDT
ASCENSION NO. 257

MANDATORY LEVELS
27400 257
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 13.

PRESSURE GEOPOTENTIAL		TEMPERATURE		RELATIVE	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5154.	19.8	6.2	41.	87.3	1.9
800.0	6615.	19.4	-3.6	20.	118.6	4.2
750.0	8021.	15.1	-5.2	24.	133.6	4.9
700.0	10520.	10.3	-6.5	30.	58.4	4.1
650.0	12504.	5.3	-10.1	32.	64.6	14.0
600.0	14560.	3.8	-23.2	12.	97.9	9.5
550.0	16967.	1.2	-27.0	10.	113.3	19.9
500.0	19450.	-5.5	-32.2	10.	103.7	23.4
450.0	22130.	-11.1	-36.6	10.	78.9	33.3
400.0	25057.	-18.2	-42.2	10.	95.5	27.3
350.0	28235.	-26.6	-46.5	11.	58.4	14.2
300.0	31912.	-31.4			299.9	22.6
250.0	36063.	-40.6			295.8	39.1
200.0	40916.	-53.5			297.1	35.6
175.0	43697.	-59.4			305.6	34.1
150.0	46815.	-65.5			302.6	33.4
125.0	50324.	-71.8			313.9	20.5
100.0	54035.	-71.1			356.2	11.1
80.0	59036.	-70.3			50.5	8.2
70.0	61643.	-69.8			52.9	11.1
60.0	64633.	-66.0			66.4	10.8
50.0	68351.	-61.6			101.3	11.3
40.0	72936.	-57.5			42.1	11.5
30.0	78924.	-55.7				

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