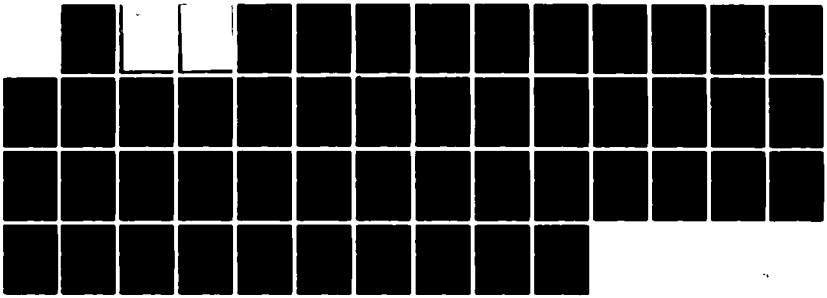
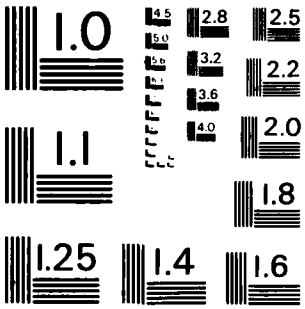
AD-A134 552 12829L LANCE MISSILE NUMBER 4584 ROUND NUMBER 393 MST 30 SEPTEMBER 1983(U) ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WSMR NM ATM.. D C KELLER SEP 83 1/1

UNCLASSIFIED ERADCOM/ASL-DR-1320 F/G 4/2 NL





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

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER
DR-1320

2. GOVT ACCESSION NO. AD-A134332

3. RECIPIENT'S CATALOG NUMBER

4. TITLE (and Subtitle)
12829C Lance
Missile Number 4584
Round Number 393 MST

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
Sep 83

13. NUMBER OF PAGES

14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)
US Army Electronics Research and 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)

A

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
Meteorological data gathered for the launching of the 12829C Lance, Missile Number 4584, Round Number 393 MST are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

CONTENTS

PAGE

INTRODUCTION---------- 1

DISCUSSION---------- 1

GENERAL AREA MAP---------- 2

LAUNCH AREA DIAGRAM---------- 3

TABLES

1. Surface Observation Taken at LC-33 at 1406 MDT---------- 4

2. WSD Pilot-Balloon Measured Low Level Wind Data Taken at 1406 MDT- 5

3. Aiming and T-Time Computer Met Message Data---------- 6

4. Jallen Significant Level Data Taken at 0900 MDT---------- 8

5. Jallen Upper Air Data Taken at 0900 MDT---------- 10

6. Jallen Mandatory Levels Taken at 0900 MDT---------- 14

7. Jallen Significant Level Data Taken at 1100 MDT---------- 15

8. Jallen Upper Air Data Taken at 1100 MDT---------- 17

9. Jallen Mandatory Levels Taken at 1100 MDT---------- 22

10. WSD Significant Level Data Taken at 1406 MDT---------- 23

11. WSD Upper Air Data Taken at 1406 MDT---------- 25

12. WSD Mandatory Levels Taken at 1406 MDT---------- 30

13. Holloman Significant Level Data Taken at 1320 MDT---------- 31

14. Holloman Upper Air Data Taken at 1320 MDT---------- 32

15. Holloman Mandatory Levels Taken at 1320 MDT---------- 37

16. Jallen Significant Level Data Taken at 1400 MDT---------- 38

17. Jallen Upper Air Data Taken at 1400 MDT---------- 40

18. Jallen Mandatory Levels Taken at 1400 MDT---------- 44

INTRODUCTION

12829C Lance, Missile Number 4584, Round Number 393-MST, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1406:04 MDT, 30 Sep 1983. The scheduled launch time was 1400 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 wre obtained by the following methods:

1. Observations

a. Surface

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

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

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

SITE AND ALTITUDE

WSD 2760 Meters

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

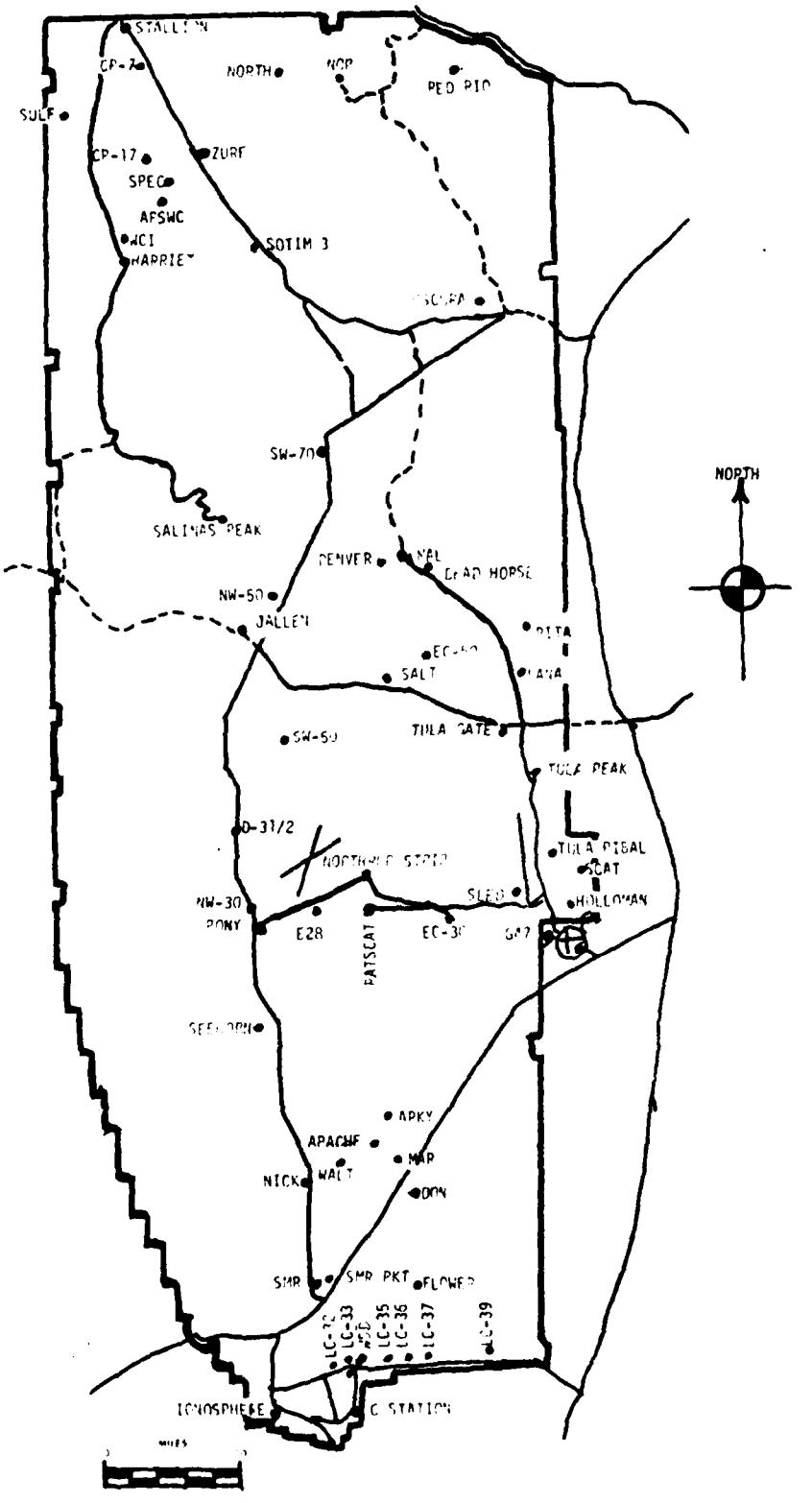
SITE AND TIME

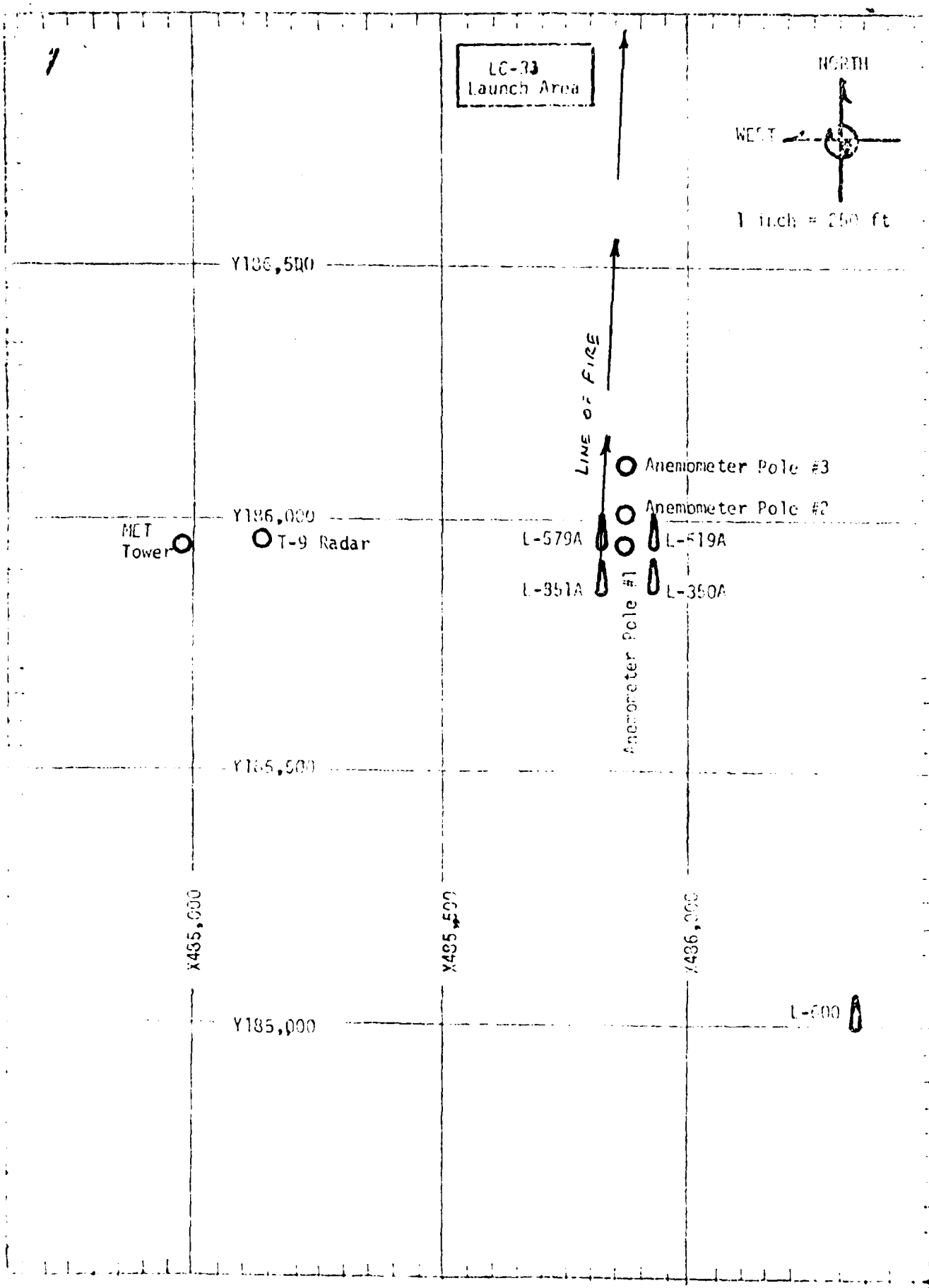
Jallen 0900 MDT
Jallen 1100 MDT
WSD 1406 MDT (Launch Area Data)
Holloman 1320 MDT (Mid-Course Data)
Jallen 1400 MDT (Impact Area Data)

DTIC

A1

WSMR METEOROLOGICAL SITES




LC-33
Launch Area
NORTH
WEST
1 inch = 250 ft
Y186,500
Y186,000
Y185,500
Y185,000
X485,000
X485,500
X486,000
LINE OF FIRE
Anemometer Pole #3
Anemometer Pole #2
Anemometer Pole #1
MET
Tower
T-9 Radar
L-579A
L-519A
L-351A
L-350A
L-600

DIRECT SURFACE OBSERVATION

TABLE 1 STATION LC-33

DATE 30 (DAY) Sep (MONTH) 83 (YEAR) X= 484,185.64 Y= 185,957.73 H= 3995.00

TIME "D T	PRESSURE mbs	TEMPERATURE °F	°C	DEW POINT °F	°C	RELATIVE HUMIDITY %	DENSITY gm/m3	WIND DIRECTION degs Tn	SPEED kts	CHARACTER kts	VISIBILITY
1406	880.5		26.0		15.8	53		250	04		10

OBSTRUCTIONS TO VISIBILITY	CLOUDS 1st LAYER AMT	TYPE	HGT	2nd LAYER AMT	TYPE	HGT	3rd LAYER AMT	TYPE	HGT	REMARKS
	1	SC	3500	5	CU	5000	3	AC	10,000	CB N+E TCU N-NE+W, RWU W

PSYCHROMETRIC COMPUTATION

TIME: MDT	1406		
DRY BULB TEMP.	26.0		
WET BULB TEMP.	19.0		
WET BULB DEPR.	7.0		
DEW POINT	15.8		
RELATIVE HUMID.	53		

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM WSD DATE 30 Sept 83 TIME 1406

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

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____.

HEIGHTS ARE METERS AGL____ OR FEET AGL_____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	210	16	1680	215	15			
60	218	13	1740	212	16			
120	223	11	1800	222	17			
180	232	10	1860	214	23			
240	221	08	1920	216	23			
300	223	09	1980	218	25			
360	240	06	2040	213	27			
420	220	09	2100	208	20			
480	234	10	2160	207	25			
540	236	07	2220	206	20			
600	221	12	2280	223	30			
660	240	11	2340	204	24			
720	224	09	2400	211	23			
780	229	10	2460	221	29			
840	256	08	2520	219	27			
900	226	10	2580	220	29			
960	211	12	2640	211	23			
1020	197	08	2700	213	30			
1080	192	10	2760	212	28			
1140	184	10						
1200	203	17						
1260	212	12						
1320	210	11						
1380	203	11						
1440	216	10						
1500	204	12						
1560	223	18						
1620	221	18						

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

30 September 1983

JALLEN 0900 MDT
METCM1332065
301500124879

00178002	29260879
01206002	29170868
02308009	28980843
03321016	28740804
04342020	28500758
05378023	28190714
06383039	27790671
07364041	27500631
08359039	27190593
09357038	26920557
10390034	26690523
11400033	26350490
12403043	25940444
13384046	25230389
14378045	24400339
15388051	23580294
16401062	22820254
17405081	22170219
18429083	21450181
19425088	20860159
20414054	20580135
21381038	20400115
22312016	20790097
23387026	20990083
24017001	21310070
25352017	21510060
26100011	21750051

JALLEN 1100 MDT
METCM1332065
301700124879

00382002	29530879
01249004	29310869
02304005	29080844
03305013	28750805
04345021	28460759
05385028	28120714
06388033	27820672
07378035	27560632
08383031	27260594
09382034	26960558
10389036	26600523
11386041	26320491
12398039	25820445
13401041	25130389
14403039	24380339
15403054	23680294
16390066	22910254
17400073	22120219
18424085	21400187
19426089	20950159
20415054	20760135
21372041	20500115
22340026	20640097
23370022	21120083
24064005	21390071
25371015	21600060
26314006	21660052

WSD 1406 MDT
METCM1324064
302010122880

00373016	30110880
01408012	29860870
02385007	29690846
03389011	29310808
04367013	28830762
05377018	28430718
06375025	28090676
07373025	27760636
08366027	27390597
09371029	27030561
10400025	26740527
11400034	26550494
12390044	26010448
13384028	25310393
14398026	24670343
15405043	23930298
16403051	23070258
17402066	22230222
18422088	21550190
19428086	20810162
20434066	20570137
21393044	20440116
22378038	20480098
23395017	21090084
24052012	21310071
25359016	21490061
26185004	21670052

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

30 September 1983

HOLLOMAN 1320 MDT
METCM1329061
301930125877

00338008	30120877
01352005	29860867
02360008	29430842
03311012	29060804
04344012	28650758
05330017	28280713
06339022	27930671
07348028	27580632
08367034	27240593
09368033	27080557
10373033	26830523
11385032	26520491
12416043	26020445
13419044	25370390
14405040	24550340
15400039	23830296
16397054	23050256
17409066	22180220
18420086	21530188
19426095	20930160
20431056	20630136
21396042	20380115
22371027	20490098
23395030	21080083
24479003	21290071
25367011	21560060
26106008	21690052

JALLEN 1400 MDT
METCM1332065
302000124879

00000000	29720879
01374002	29550869
02467006	29270844
03439013	29020805
04394014	28600759
05350021	28180715
06341029	27900672
07354035	27560632
08358041	27260594
09373042	27010558
10383043	26760524
11388045	26480491
12401047	25900446
13405053	25250390
14405054	24490340
15385042	23780295
16390057	22970255
17401074	22140220
18411092	21490188
19418092	20890160
20423069	20730136
21383049	20580115
22388037	20530098
23365026	21080083
24586014	21250071
25400008	21510060
26183005	21670052

STATION ALTITUDE [illegible] MSL
[illegible] SEP. [illegible] 0900 MDT
[illegible] NO. [illegible]

SIGNIFICANT LEVEL DATA
[illegible]
JALIFO

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 4

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
[illegible]	[illegible]	17.3	14.2	82.0
[illegible]	[illegible]	16.8	13.3	80.0
[illegible]	[illegible]	14.8	13.8	94.0
[illegible]	[illegible]	14.8	14.3	98.0
[illegible]	[illegible]	11.5	11.5	98.0
[illegible]	[illegible]	11.3	10.2	93.0
[illegible]	[illegible]	11.3	7.6	78.0
[illegible]	[illegible]	6.7	1.8	71.0
[illegible]	[illegible]	2.0	1.3	95.0
[illegible]	[illegible]	.7	.3	47.0
577.0	[illegible]	-1.6	-4.0	47.0
[illegible]	[illegible]	-4.8	-5.1	98.0
[illegible]	[illegible]	-6.5	-12.8	61.0
[illegible]	[illegible]	-9.3	-16.9	54.0
[illegible]	[illegible]	-10.6	-25.5	28.0
477.0	[illegible]	-10.5	-34.3	12.0
[illegible]	[illegible]	-13.8	-34.8	15.0
[illegible]	[illegible]	-14.9	-31.3	23.0
[illegible]	[illegible]	-15.0	-36.4	14.0
[illegible]	[illegible]	-17.5	-36.5	14.0
[illegible]	[illegible]	-19.3	-39.7	24.0
[illegible]	[illegible]	-21.6	-29.4	49.0
371.0	[illegible]	-23.9	-26.8	77.0
[illegible]	[illegible]	-29.3	-41.3	30.0
[illegible]	[illegible]	-30.8	-43.9	29.0
[illegible]	[illegible]	-31.0	-49.0	15.0
[illegible]	[illegible]	-31.9	-51.6	12.0
[illegible]	[illegible]	-36.2	-54.5	13.0
[illegible]	[illegible]	-38.9	-56.7	13.0
[illegible]	[illegible]	-45.9		
[illegible]	[illegible]	-53.5		
[illegible]	[illegible]	-56.8		
[illegible]	[illegible]	-61.0		
[illegible]	[illegible]	-65.7		
[illegible]	[illegible]	-65.7		
[illegible]	[illegible]	-67.9		
[illegible]	[illegible]	-67.1		
[illegible]	[illegible]	-67.1		
[illegible]	[illegible]	-68.7		
[illegible]	[illegible]	-71.3		

STATION ALTITUDE 4251.00 FEET MSL
30 SEP. 23
ASCENSION NO. 143

0900 MDT

SIGNIFICANT LEVEL DATA
2730030143
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 4 Con't

PRESSURE MILLIBARS	GEOPOTIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
135.0	51521.7	-71.1		
100.6	52863.9	-67.1		
100.6	54177.7	-66.7		
100.0	54297.5	-65.0		
80.8	58601.4	-63.6		
74.7	60206.3	-59.8		
70.0	61544.8	-56.5		
50.0	68553.1	-55.2		
41.0	72758.8	-53.2		
38.6	74039.9	-54.4		

STATION ALTITUDE 4051.00 FEET MSL
30 SEP. 85
ASCENSION NO. 145 0900 MDT

UPPER AIR DATA
2730030145
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 5

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
4051.0	873.7	17.3	14.2	82.0	1046.6	666.3	180.0	3.9	1.000306
4500.0	864.7	15.2	13.5	83.0	1033.9	665.0	140.2	4.8	1.000301
5000.0	849.4	14.8	13.4	88.2	1020.4	663.4	162.3	7.5	1.000300
5500.0	834.5	14.2	13.4	88.0	1004.1	662.8	172.1	10.6	1.000297
6000.0	819.9	13.5	12.8	88.0	989.6	661.6	177.3	13.8	1.000290
6500.0	804.5	12.9	12.1	88.0	975.4	660.5	180.3	15.7	1.000283
7000.0	790.3	11.3	10.2	83.1	962.1	659.0	182.6	17.6	1.000275
7500.0	776.1	11.3	9.4	82.4	945.4	658.8	187.4	18.2	1.000262
8000.0	762.1	10.8	7.0	77.2	930.4	658.1	192.2	18.7	1.000254
8500.0	745.2	9.4	5.4	75.9	916.6	657.0	197.5	20.3	1.000248
9000.0	734.6	8.0	4.7	79.5	903.0	655.9	202.2	22.2	1.000242
9500.0	721.5	6.1	3.6	73.2	889.6	654.8	206.6	25.1	1.000236
10000.0	708.2	7.5	2.5	71.9	876.4	653.6	210.5	28.4	1.000231
10500.0	695.2	6.2	1.8	73.6	863.7	652.4	213.9	30.8	1.000226
11000.0	682.4	4.8	1.8	80.5	851.9	650.8	217.0	33.0	1.000224
11500.0	669.8	3.5	1.6	87.5	840.2	649.2	219.1	34.5	1.000221
12000.0	657.9	2.1	1.3	94.5	828.8	647.6	213.8	35.9	1.000218
12500.0	645.1	1.5	.9	95.8	815.1	646.9	209.5	37.9	1.000214
13000.0	633.1	1.0	.5	96.6	801.5	646.2	204.7	40.4	1.000211
13500.0	621.2	.2	-.2	97.0	788.7	645.3	202.7	41.1	1.000206
14000.0	609.5	-.3	-1.2	97.0	776.8	644.1	201.5	41.2	1.000202
14500.0	597.9	-1.7	-2.2	97.0	765.0	642.9	201.7	40.5	1.000197
15000.0	586.7	-2.7	-3.1	97.0	753.5	641.6	202.4	39.5	1.000193
15500.0	575.6	-3.7	-4.1	97.1	741.9	640.5	202.2	38.4	1.000189
16000.0	564.9	-4.3	-4.6	97.6	729.5	639.7	201.4	37.6	1.000185
16500.0	553.4	-4.9	-5.5	95.4	717.3	638.9	204.0	35.9	1.000181
17000.0	543.2	-5.4	-7.7	83.9	705.2	638.2	208.7	34.1	1.000175
17500.0	532.5	-6.0	-10.1	72.5	693.3	637.4	214.3	33.9	1.000170
18000.0	522.6	-6.5	-12.3	61.8	681.6	636.7	219.9	34.8	1.000164
18500.0	512.5	-7.7	-15.5	57.9	671.7	635.1	221.8	34.8	1.000160
19000.0	502.6	-9.0	-16.4	54.8	661.9	633.6	222.5	34.6	1.000157
19500.0	492.8	-9.9	-19.3	43.7	651.3	632.5	224.4	34.3	1.000152
20000.0	483.2	-10.5	-20.7	40.9	640.5	631.6	226.7	34.2	1.000147
20500.0	473.7	-10.8	-30.3	12.3	628.9	631.0	223.6	35.6	1.000142
21000.0	464.9	-11.5	-30.4	13.2	618.9	629.9	230.7	38.0	1.000140
21500.0	455.2	-12.8	-30.5	14.1	608.9	628.7	230.6	38.8	1.000137
22000.0	446.3	-13.8	-30.7	15.0	599.2	627.5	228.1	37.7	1.000135
22500.0	437.9	-14.9	-31.4	21.7	589.9	626.2	222.4	37.7	1.000134
23000.0	428.7	-15.2	-32.0	18.0	578.9	625.7	221.6	42.8	1.000130
23500.0	420.1	-16.2	-33.4	14.0	569.4	624.6	221.0	48.0	1.000128

STATION ALTITUDE 4651.00 FEET MSL
30 SEP. 63 0900 MDT
ASCENSION NO. 143

UPPER AIR DATA
2739030143
JALLEN

TABLE 5 Con't

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

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
24000.0	411.7	-17.1	-38.2	18.0	560.1	623.4	221.0	51.8	1.000126
24500.0	403.5	-18.6	-35.9	19.9	551.9	621.7	221.1	55.5	1.000125
25000.0	395.3	-20.1	-32.2	32.9	544.0	619.8			1.000124
25500.0	387.3	-21.5	-29.5	48.3	535.9	618.1			1.000123
26000.0	379.3	-22.7	-27.8	63.0	527.4	616.7			1.000121
26500.0	371.6	-24.0	-26.9	76.5	519.1	615.2			1.000120
27000.0	363.8	-25.1	-29.6	66.1	510.8	613.7			1.000117
27500.0	356.2	-26.3	-32.5	55.7	502.6	612.2			1.000114
28000.0	348.8	-27.5	-35.7	45.3	494.6	610.6			1.000112
28500.0	341.6	-28.7	-39.3	34.9	486.7	609.1			1.000110
29000.0	334.4	-30.1	-42.8	27.7	479.3	607.3			1.000108
29500.0	327.3	-31.4	-50.0	13.8	471.6	605.8			1.000105
30000.0	320.3	-32.7	-52.1	12.2	464.0	604.1			1.000104
30500.0	313.5	-33.8	-52.9	12.5	456.3	602.7			1.000102
31000.0	306.7	-35.0	-53.7	12.7	448.7	601.2			1.000100
31500.0	300.2	-36.2	-54.5	13.0	441.2	599.7			1.000099
32000.0	293.8	-37.5	-55.6	13.0	434.1	598.1			1.000097
32500.0	287.2	-38.8	-56.7	13.0	427.0	596.4			1.000095
33000.0	280.9	-40.0	-58.9	11.0**	419.6	594.9			1.000094
33500.0	274.6	-41.1	-61.5	8.9**	412.3	593.4			1.000092
34000.0	268.5	-42.3	-64.4	6.8**	405.2	592.0			1.000090
34500.0	262.5	-43.4	-69.6	4.6**	398.1	590.5			1.000089
35000.0	256.7	-44.5	-73.0	2.5**	391.2	589.0			1.000087
35500.0	251.0	-45.7	-85.2	.4**	384.5	587.6	224.7	61.9	1.000086
36000.0	245.3	-46.7			377.3	586.3	225.6	62.0	1.000084
36500.0	239.7	-47.6			370.2	585.1	226.3	62.9	1.000082
37000.0	234.2	-48.6			363.3	583.8	226.4	66.1	1.000081
37500.0	228.8	-49.5			356.4	582.6	226.6	69.4	1.000079
38000.0	223.6	-50.5			349.7	581.4	228.2	74.1	1.000078
38500.0	218.4	-51.4			343.2	580.1	229.6	78.7	1.000076
39000.0	213.4	-52.3			336.8	578.9	231.2	82.4	1.000075
39500.0	208.5	-53.3			330.4	577.6	232.9	84.7	1.000074
40000.0	203.7	-54.7			324.8	575.9	234.6	87.1	1.000072
40500.0	198.9	-56.0			319.1	574.0	235.8	88.8	1.000071
41000.0	194.1	-57.1			313.0	572.6	236.7	89.8	1.000070
41500.0	189.5	-58.1			307.0	571.2	237.6	90.9	1.000068
42000.0	185.0	-59.2			301.2	569.8	238.2	91.6	1.000067
42500.0	180.6	-60.2			295.4	568.4	238.8	92.1	1.000066
43000.0	176.2	-61.3			289.6	567.0	239.3	92.6	1.000065
43500.0	172.0	-62.2			284.1	565.8	239.4	92.5	1.000063

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

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

UPPER AIR DATA

STATION ALTITUDE 5451.06 FEET MSL — 2730030143 — GEODETIC COORDINATES

20 SEP. 83 — 0900 MDT — JALLEN — 33.16712 LAT DEG

ASCENSION NO. 193 — 106.49511 LON DEG

TABLE 5 Con't

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
44000.0	167.3	-63.1			278.3	564.7	239.5	92.5	1.000062
44500.0	165.7	-63.4			272.5	563.5	239.3	89.6	1.000061
45000.0	15[illegible].7	-64.7			266.9	562.4	238.9	86.5	1.000059
45500.0	15[illegible].8	-65.6			261.4	561.3	238.8	79.9	1.000058
46000.0	152.1	-65.7			255.2	561.1	238.6	72.5	1.000057
46500.0	148.2	-66.0			249.3	560.7	238.1	66.1	1.000056
47000.0	144.5	-66.7			243.9	559.7	237.2	60.2	1.000054
47500.0	141.0	-67.4			238.7	558.8	236.2	55.1	1.000053
48000.0	137.5	-67.5			232.8	558.7	235.0	52.9	1.000052
48500.0	134.0	-67.1			226.6	559.2	233.7	50.8	1.000050
49000.0	130.7	-67.1			221.0	559.2	232.2	49.3	1.000049
49500.0	127.5	-67.3			216.4	558.1	230.7	48.1	1.000048
50000.0	124.3	-68.9			212.0	556.6	228.4	46.7	1.000047
50500.0	121.2	-69.3			207.7	555.3	224.6	44.9	1.000046
51000.0	118.1	-71.0			203.5	553.9	220.4	43.3	1.000045
51500.0	115.1	-71.1			198.5	553.7	216.1	40.6	1.000044
52000.0	112.2	-69.1			191.6	556.5	211.2	38.2	1.000043
52500.0	109.4	-67.1			185.0	559.2	207.6	35.1	1.000041
53000.0	106.7	-67.0			180.3	559.4	204.1	31.8	1.000040
53500.0	104.1	-66.9			175.8	559.5	200.8	29.3	1.000039
54000.0	101.5	-66.7			171.3	559.7	197.6	27.4	1.000038
54500.0	99.0	-64.9			165.6	562.2	193.8	25.4	1.000037
55000.0	96.6	-64.8			161.5	562.4	189.4	23.[illegible]	1.000036
55500.0	94.2	-64.5			157.4	562.6	186.0	21.0	1.000035
56000.0	91.9	-64.4			153.4	562.8	185.4	18.0	1.000034
56500.0	89.7	-64.3			149.5	563.0	184.9	15.0	1.000033
57000.0	87.5	-64.1			145.8	563.2	191.3	12.0	1.000032
57500.0	85.3	-64.0			142.1	563.5	201.6	9.3	1.000032
58000.0	83.2	-63.8			138.5	563.7	212.6	8.5	1.000031
58500.0	81.2	-63.5			135.0	563.9	222.7	8.4	1.000030
59000.0	79.2	-62.7			131.1	565.2	229.6	8.8	1.000029
59500.0	77.3	-61.5			127.3	566.8	232.2	9.6	1.000028
60000.0	75.5	-60.5			123.5	568.4	234.0	10.4	1.000027
60500.0	73.[illegible]	-60.0			120.3	568.8	230.4	10.6	1.000027
61000.0	71.9	-60.2			117.6	568.5	227.0	10.9	1.000026
61500.0	70.2	-60.5			114.9	568.1	217.6	11.3	1.000026
62000.0	68.5	-60.2			112.0	568.6	205.9	12.2	1.000025
62500.0	66.9	-59.3			109.2	569.1	196.5	13.6	1.000024
63000.0	65.3	-59.4			106.4	569.6	190.0	15.3	1.000024
63500.0	63.7	-59.0			103.7	570.1	184.8	17.0	1.000023

STATION ALTITUDE 4351.00 FEET MSL
30 SEP. 73 0900 MDT
ASCENSION NO. 143

UPPER AIR DATA
273003143
JALLEN

TABLE 5 Con't

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC 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(TRU)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	62.2	-56.6			101.1	570.6	189.1	17.2	1.000023
64500.0	60.7	-56.3			98.5	571.1	196.1	17.0	1.000022
65000.0	59.3	-57.9			96.0	571.6	203.3	16.7	1.000021
65500.0	57.9	-57.5			93.5	572.1	211.3	16.1	1.000021
66000.0	56.5	-57.1			91.1	572.6	219.9	15.8	1.000020
66500.0	55.2	-56.8			88.8	573.1	214.2	9.3	1.000020
67000.0	53.9	-56.4			86.6	573.6	179.5	3.1	1.000019
67500.0	52.6	-56.0			84.4	574.1	68.2	6.0	1.000019
68000.0	51.3	-55.6			82.2	574.6	54.2	14.0	1.000018
68500.0	50.1	-55.2			80.1	575.1	51.2	20.3	1.000018
69000.0	49.0	-55.0			78.2	575.4	56.8	12.7	1.000017
69500.0	47.8	-54.7			76.3	575.7	78.0	5.5	1.000017
70000.0	46.7	-54.5			74.4	576.0	148.0	3.1	1.000017
70500.0	45.6	-54.3			72.6	576.4	192.8	5.0	1.000016
71000.0	44.5	-54.0			70.8	576.7	206.9	8.0	1.000016
71500.0	43.5	-53.8			69.1	577.0	190.0	6.7	1.000015
72000.0	42.5	-53.6			67.4	577.3	168.2	6.2	1.000015
72500.0	41.5	-53.3			65.8	577.6			1.000015
73000.0	40.5	-53.4			64.3	577.5			1.000014
73500.0	39.6	-53.9			62.9	576.9			1.000014
74000.0	38.7	-54.4			61.6	576.2			1.000014

STATION ALTITUDE 4351.00 FEET MSL
30 SEP. 83 0900 MDT
ASCENSION NO. 143

MANDATORY LEVELS
273003E143
JALLEN

TABLE 6

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	4978.	14.8	13.6	94.	161.7	7.3
800.0	6668.	12.1	11.7	98.	181.1	16.3
750.0	8473.	10.0	6.0	76.	196.9	20.0
700.0	10307.	6.7	1.8	71.	212.6	30.0
650.0	12299.	1.7	1.1	95.	211.6	36.9
600.0	14400.	-1.6	-2.0	97.	201.6	40.7
550.0	16661.	-5.1	-6.3	91.	205.6	35.2
500.0	19105.	-9.3	-16.9	54.	222.7	34.5
450.0	21760.	-13.4	-34.7	15.	227.6	38.2
400.0	24672.	-19.3	-34.7	24.	221.1	57.0
350.0	27877.	-27.4	-35.2	47.	9999.0	9999.0XX
300.0	31451.	-36.2	-54.5	13.	9999.0	9999.0XX
250.0	35515.	-45.9			224.8	61.9
200.0	40289.	-55.8			235.6	88.5
175.0	43841.	-61.6			239.3	92.5
150.0	46178.	-65.7			238.5	69.1
125.0	49747.	-68.7			229.4	47.2
100.0	54173.	-65.0			195.6	26.3
80.0	58612.	-63.1			228.3	8.5
70.0	61337.	-60.5			217.1	11.3
60.0	64565.	-58.1			199.0	17.0
50.0	68299.	-55.2			51.3	20.0
40.0	72996.	-53.7				

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

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4951.00 FEET MSL
30 SEP. 83 1100 MDT
ASCENSION NO. 144

SIGNIFICANT LEVEL DATA
2730030144
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 7

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
874.4	4951.0	19.9	15.3	75.0
874.6	4735.4	17.6	13.9	79.0
856.9	5008.1	16.0	14.7	92.0
869.8	6757.5	12.7	12.4	98.0
786.2	7384.6	11.0	7.9	81.0
751.2	8423.3	9.7	8.1	90.0
722.2	9496.0	7.7	2.8	71.0
700.0	10740.0	5.6	2.1	78.0
637.8	12029.2	1.8	1.1	95.0
550.0	16715.1	-4.8	-7.1	84.0
522.2	18050.2	-8.2	-8.6	97.0
500.0	19154.2	-9.2	-9.5	98.0
484.4	19963.8	-11.0	-15.5	69.0
476.4	20385.9	-12.1	-23.5	38.0
468.6	20797.6	-14.1	-35.7	14.0
463.1	21091.8	-15.0	-37.2	13.0
447.9	21922.1	-14.9	-37.1	13.0
443.2	22185.3	-13.6	-36.8	12.0
400.0	24716.1	-20.6	-39.7	16.0
386.6	25543.1	-22.1	-36.4	21.0
365.2	26912.2	-25.5	-28.2	78.0
349.6	27949.9	-27.9	-30.4	79.0
325.2	29647.6	-31.8	-36.5	63.0
313.8	30109.6	-32.5	-40.8	43.0
306.0	31957.5	-34.1	-46.5	27.0
300.0	31512.9	-35.2	-47.8	26.0
281.6	32953.6	-39.1	-51.6	25.0
256.0	35608.1	-44.8		
219.2	38453.7	-51.9		
200.0	40396.6	-56.5		
184.4	42080.3	-60.2		
172.7	43424.4	-61.3		
157.8	45254.7	-64.8		
150.0	46276.1	-64.2		
136.8	48122.9	-66.9		
131.6	48800.0	-64.2		
113.8	51792.0	-70.1		
111.4	52213.1	-67.3		
100.0	54752.3	-68.8		
46.8	55000.7	-65.2		

STATION ALTITUDE 5,251.00 FEET MSL
30 SEP. 83 1100 MDT
ASCENSION NO. 199

SIGNIFICANT LEVEL DATA
2730030149
DALLEN

TABLE 7 Con't

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
91.0	56843.5	-65.8		
85.4	58254.7	-61.2		
78.0	61601.0	-59.7		
67.4	62395.8	-57.8		
58.0	68640.0	-56.1		
48.4	69320.8	-57.6		
43.4	71605.9	-55.1		
36.0	75559.2	-54.7		
30.0	78833.0	-52.3		
20.0	84283.9	-47.6		
10.4	89975.6	-47.2		

UPPER AIR DATA
2730030144
JALLEN

STATION ALTITUDE 4651.00 FEET MSL
30 SEP. 83 1100 MDT
ASCENSION NO. 149

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8

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
4651.0	879.4	19.4	15.3	75.0	1037.5	669.4	215.0	3.9	1.000308
4500.0	865.5	17.2	14.1	82.2	1031.1	666.2	194.6	4.9	1.000302
5000.0	850.2	16.0	14.7	91.8	1016.7	665.0	181.2	6.5	1.000302
5500.0	835.1	14.8	13.9	94.2	1003.1	663.5	173.3	8.3	1.000296
6000.0	820.3	13.6	13.0	96.4	989.7	662.0	168.2	10.2	1.000290
6500.0	805.6	12.5	11.8	95.6	976.2	660.5	174.2	12.6	1.000282
7000.0	791.2	11.6	9.6	87.4	962.2	659.3	181.2	15.5	1.000270
7500.0	776.9	10.9	7.9	82.0	948.0	658.2	187.9	18.1	1.000261
8000.0	762.9	10.2	8.1	86.3	932.8	657.6	194.3	20.6	1.000259
8500.0	749.1	9.6	7.8	88.6	918.1	656.8	200.5	22.8	1.000255
9000.0	735.5	8.6	5.3	79.8	905.1	655.5	207.2	24.8	1.000244
9500.0	722.1	7.7	2.3	71.0	892.2	654.1	212.5	26.8	1.000235
10000.0	709.3	6.4	2.4	75.2	879.8	652.7	216.6	28.3	1.000231
10500.0	695.8	5.4	2.0	79.1	867.0	651.4	219.1	29.9	1.000228
11000.0	682.9	4.6	1.9	82.5	853.3	650.5	219.0	31.4	1.000225
11500.0	670.3	3.8	1.7	85.9	839.8	649.6	218.1	32.8	1.000221
12000.0	657.9	3.1	1.5	89.3	826.5	648.7	216.0	33.7	1.000218
12500.0	645.7	2.3	1.3	92.8	813.4	647.8	214.5	34.0	1.000215
13000.0	633.7	1.5	.7	90.5	800.6	646.9	213.9	33.4	1.000211
13500.0	621.7	.7	-.3	93.1	788.1	645.8	213.6	32.8	1.000206
14000.0	610.0	-.2	-1.4	91.7	775.6	644.7	214.1	32.1	1.000201
14500.0	598.5	-1.0	-2.4	90.3	763.7	643.7	214.4	31.8	1.000196
15000.0	587.2	-1.9	-3.5	88.9	751.7	642.6	214.6	32.2	1.000192
15500.0	576.1	-2.7	-4.5	87.4	740.0	641.6	214.9	32.6	1.000188
16000.0	565.2	-3.6	-5.6	86.0	728.4	640.5	215.1	33.5	1.000183
16500.0	554.5	-4.4	-6.6	84.6	717.1	639.4	215.3	34.3	1.000179
17000.0	543.9	-5.5	-7.4	86.8	706.3	638.1	216.1	35.1	1.000176
17500.0	533.5	-6.8	-7.9	91.6	696.1	636.6	216.8	35.9	1.000173
18000.0	523.2	-8.1	-8.5	96.5	686.0	635.0	217.3	37.1	1.000170
18500.0	513.1	-8.6	-8.9	97.4	674.1	634.4	217.8	38.5	1.000167
19000.0	503.1	-9.1	-9.3	97.9	662.2	633.8	218.1	39.5	1.000164
19500.0	493.3	-10.0	-11.9	85.7	651.6	632.6	218.5	40.1	1.000159
20000.0	483.7	-11.1	-16.1	66.3	642.1	631.1	218.9	40.5	1.000153
20500.0	474.2	-12.7	-26.1	31.3	633.6	628.9	219.9	40.6	1.000145
21000.0	464.8	-14.7	-35.7	13.3	626.4	626.3	220.9	40.6	1.000141
21500.0	455.6	-15.0	-37.1	13.0	614.5	626.1	222.3	40.5	1.000138
22000.0	446.5	-14.5	-37.0	12.7	601.3	626.6	223.6	40.4	1.000135
22500.0	437.5	-14.5	-37.1	12.5	589.2	626.6	225.0	38.9	1.000133
23000.0	428.8	-15.9	-37.6	13.3	580.5	625.0	226.4	37.4	1.000131
23500.0	420.2	-17.2	-38.2	14.1	571.9	623.3	226.2	37.2	1.000129

STATION ALTITUDE 4051.00 FEET MSL
30 SEP. 83 1100 MDT
ASCENSION NO. 149

UPPER AIR DATA
273000.44
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8 Con't

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
24000.0	411.8	-18.6	-30.8	14.9	563.5	621.6	226.0	37.0	1.000127
24500.0	405.5	-20.0	-30.5	15.7	555.2	619.9	225.7	38.0	1.000125
25000.0	395.3	-21.1	-30.2	17.7	546.4	618.5	225.3	39.1	1.000123
25500.0	387.3	-22.0	-30.5	20.7	537.1	617.4	225.6	40.8	1.000121
26000.0	379.3	-23.2	-31.0	40.0	528.6	616.0	226.1	42.7	1.000120
26500.0	371.5	-24.5	-29.8	60.8	520.2	614.5	226.5	42.7	1.000119
27000.0	363.9	-25.7	-28.4	78.1	511.9	613.0	226.7	40.9	1.000118
27500.0	356.3	-26.9	-29.4	78.6	503.7	611.6	227.0	39.1	1.000115
28000.0	348.9	-28.0	-30.6	78.5	495.5	610.1	226.9	37.0	1.000113
28500.0	341.5	-29.2	-32.3	73.8	487.4	608.7	226.7	34.9	1.000111
29000.0	334.3	-30.3	-34.1	69.1	479.4	607.2	225.8	36.9	1.000109
29500.0	327.3	-31.5	-35.9	64.4	471.5	605.8	224.8	40.7	1.000107
30000.0	320.3	-32.3	-39.6	47.7	463.3	604.6	225.1	44.5	1.000104
30500.0	313.5	-33.2	-42.9	36.4	454.9	603.6	225.5	48.4	1.000102
31000.0	306.8	-34.0	-46.1	28.0	446.8	602.5	225.7	54.6	1.000100
31500.0	300.2	-35.2	-47.6	26.0	439.4	601.0	225.9	60.2	1.000098
32000.0	293.6	-36.5	-49.1	25.7	432.3	599.3	226.6	61.7	1.000097
32500.0	287.3	-37.9	-50.4	25.3	425.3	597.6	227.3	62.5	1.000095
33000.0	281.0	-39.2	-51.8	24.6**	418.4	595.9	228.0	61.0	1.000094
33500.0	274.8	-40.3	-54.5	19.9**	411.0	594.5	227.4	60.4	1.000092
34000.0	268.7	-41.3	-57.6	15.1**	403.6	593.1	223.7	62.1	1.000090
34500.0	262.7	-42.4	-61.3	10.4**	396.7	591.6	220.6	63.6	1.000088
35000.0	256.9	-43.5	-66.6	5.7**	389.7	590.4	218.1	64.3	1.000087
35500.0	251.2	-44.6	-70.8	1.0**	382.9	589.0	217.0	64.6	1.000085
36000.0	245.5	-45.8			376.2	587.4	218.0	64.0	1.000084
36500.0	239.9	-47.0			369.6	585.8	219.2	64.1	1.000082
37000.0	234.5	-48.3			363.2	584.2	220.4	65.3	1.000081
37500.0	229.1	-49.5			356.9	582.6	221.9	67.3	1.000079
38000.0	223.9	-50.8			350.7	581.0	223.7	70.3	1.000078
38500.0	218.8	-52.0			344.6	579.4	225.5	72.4	1.000077
39000.0	213.7	-53.2			338.4	577.8	227.4	73.7	1.000075
39500.0	208.7	-54.4			332.3	576.2	229.4	75.1	1.000074
40000.0	203.8	-55.6			326.3	574.7	231.6	76.6	1.000073
40500.0	199.0	-56.7			320.3	573.1	233.6	78.5	1.000071
41000.0	194.3	-57.8			314.3	571.7	235.3	81.6	1.000070
41500.0	189.6	-58.9			308.4	570.2	236.9	84.9	1.000069
42000.0	185.1	-60.0			302.6	568.7	237.9	87.6	1.000067
42500.0	180.7	-60.5			296.0	568.0	238.7	90.3	1.000066
43000.0	176.3	-61.0			289.5	567.5	239.3	91.7	1.000064
43500.0	172.1	-61.4			283.1	566.8	239.8	91.8	1.000063

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

UPPER AIR DATA

STATION ALTITUDE 6651.00 FEET MSL — 2730030144 — GEODETIC COORDINATES

30 SEP. 83 — 1100 MDT — JALLEN — 33.16712 LAT DEG

ASCENSION NO. 149 — 106.49511 LON DEG

TABLE 8 Con't

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
44000.0	167.9	-62.4			277.5	565.6	240.1	91.4	1.000062
44500.0	163.8	-63.4			272.0	564.3	240.0	88.0	1.000061
45000.0	159.6	-64.3			266.6	563.0	239.9	84.6	1.000059
45500.0	155.9	-64.7			260.5	562.5	239.2	80.3	1.000058
46000.0	152.1	-64.4			253.7	562.9	238.1	75.5	1.000057
46500.0	148.3	-64.5			247.7	562.7	236.9	70.9	1.000055
47000.0	144.7	-65.3			242.4	561.7	235.9	67.0	1.000054
47500.0	141.1	-66.0			237.3	560.7	234.7	63.0	1.000053
48000.0	137.6	-66.7			232.3	559.7	233.8	59.3	1.000052
48500.0	134.3	-65.6			225.3	561.3	233.0	55.7	1.000050
49000.0	130.9	-64.4			218.5	562.9	231.5	52.3	1.000049
49500.0	127.7	-65.4			214.1	561.5	227.8	50.2	1.000048
50000.0	124.5	-66.4			209.9	560.1	223.7	48.2	1.000047
50500.0	121.4	-67.5			205.7	558.7	219.0	46.5	1.000046
51000.0	118.4	-68.5			201.6	557.3	214.0	45.2	1.000045
51500.0	115.5	-69.5			197.5	555.9	209.2	43.7	1.000044
52000.0	112.6	-68.7			191.9	557.0	206.8	40.3	1.000043
52500.0	109.8	-67.5			186.0	558.7	203.9	37.0	1.000041
53000.0	107.1	-67.9			181.7	558.2	202.3	34.1	1.000040
53500.0	104.4	-68.2			177.4	557.7	201.2	31.3	1.000040
54000.0	101.8	-68.6			173.3	557.2	199.9	29.3	1.000039
54500.0	99.3	-68.0			168.5	558.0	198.6	28.5	1.000038
55000.0	96.8	-65.2			162.2	561.8	197.2	27.7	1.000036
55500.0	94.4	-65.5			158.4	561.4	196.8	26.9	1.000035
56000.0	92.1	-65.8			154.7	561.0	196.4	26.0	1.000034
56500.0	89.9	-66.1			150.3	562.3	197.5	24.8	1.000033
57000.0	87.7	-63.8			145.9	563.7	199.8	23.4	1.000032
57500.0	85.5	-62.8			141.6	565.1	202.1	22.2	1.000032
58000.0	83.4	-61.7			137.5	566.5	204.1	21.3	1.000031
58500.0	81.4	-61.1			133.8	567.3	206.2	20.5	1.000030
59000.0	79.5	-60.5			130.4	567.6	205.8	19.6	1.000029
59500.0	77.6	-60.6			127.1	567.9	205.3	18.7	1.000028
60000.0	75.7	-60.9			124.0	568.2	205.1	16.9	1.000028
60500.0	73.9	-60.2			120.9	568.5	204.9	14.9	1.000027
61000.0	72.1	-60.8			117.8	568.8	205.5	12.8	1.000026
61500.0	70.4	-59.7			114.9	569.1	207.2	10.7	1.000026
62000.0	68.7	-58.8			111.6	570.4	209.9	8.9	1.000025
62500.0	67.1	-57.8			108.5	571.7	214.4	7.8	1.000024
63000.0	65.5	-57.6			105.8	571.9	220.5	6.7	1.000024
63500.0	63.9	-57.5			103.3	572.1	226.4	6.1	1.000023

STATION ALTITUDE 4351.00 FEET MSL
30 SEP. 83 1100 MDT
ASCENSION NO. 169

UPPER AIR DATA
273030144
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8 Con't

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
64000.0	62.4	-57.4			100.6	572.3	233.4	5.7	1.000022
64500.0	60.9	-57.2			98.3	572.5	239.0	5.0	1.000022
65000.0	59.5	-57.1			95.9	572.6	245.0	4.3	1.000021
65500.0	58.1	-57.0			93.6	572.8	251.7	3.1	1.000021
66000.0	56.7	-56.8			91.3	573.0	267.8	1.4	1.000020
66500.0	55.4	-56.7			89.1	573.2	17.0	.7	1.000020
67000.0	54.1	-56.5			87.0	573.4	70.5	2.3	1.000019
67500.0	52.8	-56.4			84.9	573.5	79.0	4.1	1.000019
68000.0	51.6	-56.3			82.8	573.7	89.3	6.5	1.000018
68500.0	50.3	-56.1			80.8	573.9	94.5	9.1	1.000018
69000.0	49.1	-56.9			79.2	572.9	92.3	10.7	1.000018
69500.0	48.0	-57.4			77.5	572.2	86.6	11.6	1.000017
70000.0	46.9	-56.9			75.5	572.9	81.1	12.7	1.000017
70500.0	45.8	-56.3			73.5	573.7	70.8	15.0	1.000016
71000.0	44.7	-55.8			71.6	574.4	63.4	17.6	1.000016
71500.0	43.6	-55.2			69.7	575.1	60.5	20.7	1.000016
72000.0	42.6	-55.1			68.1	575.3	59.9	23.9	1.000015
72500.0	41.6	-55.0			66.4	575.4	59.6	26.6	1.000015
73000.0	40.6	-55.0			64.9	575.5	61.0	24.4	1.000014
73500.0	39.7	-54.9			63.3	575.5	62.7	22.3	1.000014
74000.0	38.8	-54.9			61.9	575.6	65.3	19.8	1.000014
74500.0	37.9	-54.8			60.4	575.7	69.2	17.0	1.000013
75000.0	37.0	-54.8			59.0	575.7	74.0	14.6	1.000013
75500.0	36.1	-54.7			57.6	575.8	76.0	13.7	1.000013
76000.0	35.3	-54.4			56.2	576.2	78.4	12.9	1.000013
76500.0	34.4	-54.1			54.8	576.6	81.6	11.9	1.000012
77000.0	33.6	-53.8			53.4	577.0	85.8	11.0	1.000012
77500.0	32.9	-53.5			52.1	577.4	90.2	9.9	1.000012
78000.0	32.1	-53.2			50.8	577.8	92.1	7.6	1.000011
78500.0	31.4	-52.9			49.6	578.2	95.6	5.3	1.000011
79000.0	30.6	-52.6			48.4	578.6	104.0	4.3	1.000011
79500.0	29.9	-52.3			47.2	579.0	115.3	4.0	1.000011
80000.0	29.2	-52.0			46.0	579.3	132.2	4.0	1.000010
80500.0	28.6	-51.7			44.9	579.7	157.9	6.2	1.000010
81000.0	27.9	-51.5			43.9	580.0	169.1	8.9	1.000010
81500.0	27.3	-51.2			42.8	580.4	168.3	9.5	1.000010
82000.0	26.6	-50.9			41.8	580.7	162.1	8.9	1.000009
82500.0	26.0	-50.7			40.8	581.1	154.5	8.3	1.000009
83000.0	25.4	-50.4			39.8	581.5	138.3	7.7	1.000009
83500.0	24.9	-50.1			38.8	581.8	120.9	7.7	1.000009

STATION ALTITUDE [illegible] FT MSL
30 SEP. 83 1100 MDT
ASCENSION NO. [illegible]

UPPER AIR DATA
273030144
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 8 Con't

GEOMETRIC 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
84000.0	24.[illegible]	-49.9			37.9	582.1	109.3	8.7	1.000008
84500.0	23.7	-49.6			37.0	582.5	107.7	10.3	1.000008
85000.0	23.2	-49.3			36.1	582.8	106.5	11.9	1.000008
85500.0	22.7	-49.1			35.2	583.2	90.1	16.0	1.000008
86000.0	22.2	-48.8			34.4	583.5	75.9	23.3	1.000008
86500.0	21.6	-48.5			33.6	583.9	68.7	31.3	1.000007
87000.0	21.1	-48.2			32.8	584.2			1.000007
87500.0	20.7	-48.0			32.0	584.6			1.000007
88000.0	20.2	-47.7			31.2	584.9			1.000007
88500.0	19.7	-47.4			30.5	585.3			1.000007

STATION ALTITUDE 4651.00 FEET MSL
30 SEP. 85 1100 MDT
ASCENSION NO. 144

MANDATORY LEVELS
2730030144
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 9

PRESSURE	GEOPOTENTIAL	TEMPERATURE AIR	TEMPERATURE DEWPOINT	REL.HUM. PERCENT	WIND DATA DIRECTION	WIND DATA SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5035.	16.0	14.7	92.	181.1	6.5
800.0	6609.	12.1	11.0	92.	177.3	15.7
750.0	8460.	9.6	7.9	89.	200.0	22.7
700.0	10530.	5.6	2.1	78.	219.1	29.3
650.0	12812.	2.6	1.3	92.	219.8	34.2
600.0	15259.	-.0	-2.3	90.	219.9	31.7
550.0	16895.	-4.8	-7.1	84.	215.6	34.6
500.0	19153.	-9.2	-9.5	98.	218.2	39.7
450.0	21774.	-14.0	-37.1	13.	223.1	40.5
400.0	24626.	-20.6	-39.7	16.	225.5	38.5
350.0	27874.	-27.8	-30.3	79.	226.9	37.3
300.0	31752.	-35.2	-47.8	26.	225.9	60.2
250.0	35572.	-44.8			217.2	64.5
200.0	40301.	-56.5			233.2	77.8
175.0	43046.	-61.1			239.5	91.7
150.0	46154.	-64.2			237.5	73.1
125.0	49722.	-66.3			224.4	48.5
100.0	54139.	-68.8			199.0	28.8
80.0	58670.	-60.9			205.9	19.9
70.0	61401.	-59.7			207.5	10.4
60.0	64591.	-57.1			242.2	4.6
50.0	68385.	-56.1			95.3	3.6
40.0	73083.	-54.9			62.0	23.2
30.0	79102.	-52.3			112.9	4.0
25.0	82990.	-50.2			127.1	7.6
20.0	87709.	-47.6				

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

STATION ALTITUDE 3989.09 FEET MSL
30 SEP. 83 1400 MDT
ASCENSION NO. 468

SIGNIFICANT LEVEL DATA
2730020468
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 10

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
880.4	3989.0	25.7	14.5	50.0
873.5	4215.8	23.2	13.1	53.0
850.0	4997.1	22.2	13.5	58.0
757.6	8235.9	12.6	11.2	91.0
741.1	8844.6	12.1	8.4	78.0
713.4	9890.1	8.9	6.7	89.0
700.0	10406.9	8.5	4.5	76.0
696.6	10539.4	8.1	3.6	73.0
643.6	12675.9	4.3	1.0	79.0
617.0	13802.0	1.8	-3.3	69.0
557.4	16470.8	-4.0	-4.8	94.0
544.3	17087.2	-5.5	-6.6	92.0
500.0	19271.6	-7.6	-13.8	61.0
496.9	19430.9	-7.6	-14.4	58.0
493.9	19586.0	-7.9	-14.7	58.0
473.9	20639.0	-10.3	-15.4	66.0
456.4	21588.3	-13.0	-16.5	75.0
441.7	22408.1	-14.2	-18.4	70.0
420.5	23631.4	-16.5	-19.0	81.0
400.0	24861.7	-19.5	-22.3	78.0
344.1	28494.5	-26.4	-35.4	42.0
327.5	29666.6	-28.3	-37.9	39.0
300.0	31716.3	-33.4	-42.8	38.0
274.3	33763.8	-38.9	-47.3	40.0
250.0	35836.0	-44.3		
211.5	39453.9	-53.6		
200.0	40634.6	-55.1		
160.5	45151.7	-65.9		
150.0	46500.6	-67.5		
140.8	47750.4	-69.9		
131.2	49153.5	-65.0		
125.1	50108.8	-65.9		
112.5	52210.5	-70.6		
100.0	54522.3	-69.5		
94.7	55596.6	-68.6		
92.4	56088.0	-64.2		
87.1	57282.0	-63.9		
83.9	58043.4	-61.5		
70.0	61762.8	-60.0		
50.0	68768.4	-55.9		

SIGNIFICANT LEVEL DATA
2730020468
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 468

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 10 Con't

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
30.0	79601.1	-52.4		
28.3	84147.6	-48.6		
21.9	86406.1	-49.6		
20.0	88382.8	-47.4		
14.7	95148.3	-45.8		

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83
ASCENSION NO. 468 1406 MDT

UPPER AIR DATA
2730020468
WHITE SANDS
TABLE II Con't

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

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
3989.0	880.4	25.7	14.5	50.0	1019.0	675.9	210.0	15.9	1.000297
4000.0	880.1	25.6	14.4	50.1	1019.0	675.7	210.0	15.9	1.000297
4500.0	864.9	22.8	13.3	54.8	1011.1	672.5	211.6	14.1	1.000291
5000.0	849.9	22.2	13.5	58.0	995.6	671.8	213.6	12.3	1.000289
5500.0	834.9	20.7	13.4	63.1	982.9	670.2	216.2	10.5	1.000287
6000.0	820.2	19.2	13.2	68.2	970.5	668.5	218.7	9.6	1.000284
6500.0	805.8	17.7	12.9	73.3	958.2	666.8	218.5	10.7	1.000280
7000.0	791.6	16.3	12.5	78.4	946.2	665.1	215.0	10.8	1.000277
7500.0	777.7	14.8	12.0	83.5	934.5	663.3	208.8	10.4	1.000273
8000.0	764.0	13.3	11.5	88.6	922.9	661.6	206.8	11.2	1.000268
8500.0	750.4	12.4	10.0	85.4	909.9	660.3	208.1	12.9	1.000260
9000.0	736.9	11.6	8.1	79.2	896.5	659.3	210.6	15.2	1.000250
9500.0	723.6	10.1	7.3	83.0	885.2	657.4	211.2	18.0	1.000246
10000.0	710.5	8.8	6.2	83.9	873.4	655.8	212.3	20.2	1.000240
10500.0	697.6	8.2	3.8	73.9	859.9	654.9	212.8	22.1	1.000230
11000.0	684.8	7.3	3.0	74.3	847.1	653.8	211.9	23.3	1.000225
11500.0	672.3	6.4	2.4	75.7	834.3	652.7	211.2	24.1	1.000221
12000.0	659.9	5.5	1.8	77.1	821.7	651.6	210.5	24.8	1.000217
12500.0	647.8	4.6	1.2	78.5	809.3	650.5	210.0	25.8	1.000213
13000.0	635.8	3.6	-.2	76.1	797.6	649.2	209.5	26.8	1.000207
13500.0	624.0	2.5	-2.1	71.7	786.2	647.8	208.7	27.7	1.000201
14000.0	612.4	1.4	-3.3	70.9	774.8	646.4	207.5	28.4	1.000197
14500.0	600.8	.3	-3.5	75.5	763.2	645.2	206.3	28.7	1.000194
15000.0	589.5	-.8	-3.8	80.2	751.8	643.9	205.2	27.8	1.000191
15500.0	578.4	-1.9	-4.1	84.9	740.6	642.6	204.9	27.0	1.000188
16000.0	567.5	-3.0	-4.4	89.6	729.6	641.3	207.2	26.3	1.000185
16500.0	556.8	-4.1	-4.9	93.9	718.8	640.0	211.3	25.5	1.000182
17000.0	546.1	-5.3	-6.3	92.3	708.4	638.4	218.1	24.7	1.000178
17500.0	535.6	-5.9	-7.8	86.1	696.5	637.6	222.6	24.9	1.000173
18000.0	525.3	-6.4	-9.4	79.0	684.5	637.0	225.4	25.4	1.000168
18500.0	515.2	-6.9	-11.0	72.0	672.7	636.3	225.1	28.6	1.000164
19000.0	505.3	-7.3	-12.8	64.9	661.1	635.7	224.8	31.6	1.000160
19500.0	495.6	-7.7	-14.5	58.0	649.5	635.2	224.9	33.6	1.000155
20000.0	485.9	-8.8	-14.9	61.1	639.5	633.8	223.6	35.8	1.000153
20500.0	476.5	-10.0	-15.3	64.9	629.8	632.5	221.5	38.3	1.000150
21000.0	467.2	-11.3	-15.8	69.4	620.7	630.8	220.5	41.5	1.000148
21500.0	458.0	-12.7	-16.4	74.2	611.9	629.1	219.7	44.7	1.000146
22000.0	449.0	-13.6	-17.5	72.5	601.8	628.0	219.3	46.5	1.000143
22500.0	440.1	-14.4	-18.5	70.8	591.7	627.1	219.1	47.7	1.000140
23000.0	431.3	-15.3	-18.7	75.3	582.0	625.9	218.4	46.7	1.000138

STATION ALTITUDE 5989.00 FEET MSL
30 SEP. 83
ASCENSION NO. 468 1406 MDT

UPPER AIR DATA
2730020468
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 11

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	422.7	-16.5	-18.9	79.8	572.5	624.8	216.9	43.1	1.000135
24000.0	414.3	-17.4	-20.0	80.1	563.6	623.4	215.4	38.4	1.000133
24500.0	405.9	-18.6	-21.4	78.9	555.0	621.9	214.0	32.7	1.000130
25000.0	397.7	-19.8	-22.8	76.6	546.3	620.4	214.2	29.0	1.000127
25500.0	389.6	-20.7	-24.5	71.7	537.2	619.2	216.0	26.8	1.000125
26000.0	381.6	-21.7	-26.2	66.7	528.2	618.0	218.1	24.8	1.000122
26500.0	373.7	-22.6	-27.9	61.8	519.4	616.8	220.2	23.0	1.000119
27000.0	366.1	-23.6	-29.7	56.8	510.7	615.6	222.1	21.6	1.000117
27500.0	358.6	-24.5	-31.5	51.9	502.2	614.4	223.1	20.8	1.000115
28000.0	351.2	-25.5	-33.4	46.9	493.8	613.2	223.9	21.6	1.000112
28500.0	344.0	-26.4	-35.4	42.0	485.6	612.0	224.3	24.5	1.000110
29000.0	336.8	-27.2	-36.5	40.7	477.0	611.0	224.5	28.0	1.000108
29500.0	329.8	-28.0	-37.5	39.4	468.6	610.0	224.6	31.8	1.000106
30000.0	322.9	-29.1	-38.7	38.8	460.8	608.6	225.1	34.7	1.000104
30500.0	316.0	-30.4	-39.9	38.6	453.4	607.1	225.8	36.8	1.000102
31000.0	309.3	-31.6	-41.1	38.3	446.1	605.5	226.6	38.9	1.000100
31500.0	302.8	-32.9	-42.2	38.1	438.9	603.9	227.5	41.0	1.000099
32000.0	296.3	-34.2	-43.4	38.3	431.8	602.3	228.4	43.1	1.000097
32500.0	289.9	-35.5	-44.5	38.8	424.9	600.6	229.2	45.3	1.000095
33000.0	283.6	-36.8	-45.6	39.3	418.1	598.9	229.8	47.2	1.000094
33500.0	277.5	-38.2	-46.7	39.7	411.4	597.2	229.7	48.2	1.000092
34000.0	271.4	-39.5	-48.9	35.4**	404.7	595.5	229.5	49.2	1.000091
34500.0	265.4	-40.8	-52.8	25.8**	397.9	593.8	227.7	50.[illegible]	1.000089
35000.0	259.5	-42.1	-57.7	16.1**	391.3	592.2	226.0	52.4	1.000087
35500.0	253.8	-43.4	-65.6	6.5**	384.8	590.5	224.9	53.0	1.000086
36000.0	248.3	-44.7			378.4	588.8	224.0	53.2	1.000084
36500.0	242.9	-46.0			371.8	587.1	223.4	53.3	1.000083
37000.0	236.9	-47.3			365.4	585.5	223.1	53.5	1.000081
37500.0	231.5	-48.6			359.1	583.8	222.9	53.7	1.000080
38000.0	226.2	-49.9			352.9	582.1	224.6	58.9	1.000079
38500.0	221.0	-51.1			346.8	580.5	226.4	65.3	1.000077
39000.0	216.0	-52.4			340.9	578.8	228.5	71.3	1.000076
39500.0	211.0	-53.7			334.9	577.2	231.7	76.5	1.000075
40000.0	206.1	-54.3			328.1	576.3	234.4	81.9	1.000073
40500.0	201.3	-54.9			321.3	575.5	235.9	84.9	1.000072
41000.0	196.5	-56.0			315.2	574.1	236.9	87.2	1.000070
41500.0	191.7	-57.2			309.3	572.5	237.5	89.1	1.000069
42000.0	187.1	-58.4			303.5	570.9	237.2	90.2	1.000068
42500.0	182.6	-59.6			297.9	569.4	237.3	90.3	1.000066
43000.0	178.2	-60.8			292.3	567.8	238.2	88.1	1.000065

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

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 468

UPPER AIR DATA
2730020468
WHITE SANDS
TABLE 11 Con't

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

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
43500.0	173.9	-62.0			286.4	566.2	239.1	86.3	1.000064
44000.0	169.8	-63.1			281.6	564.6	239.8	86.0	1.000063
44500.0	165.7	-64.3			276.4	562.9	240.5	85.7	1.000062
45000.0	161.7	-65.5			271.3	561.3	241.0	86.1	1.000060
45500.0	157.7	-66.3			265.6	560.3	241.5	86.6	1.000059
46000.0	153.8	-66.9			259.8	559.5	241.9	85.2	1.000058
46500.0	150.0	-67.5			254.1	558.7	242.5	82.9	1.000057
47000.0	146.3	-68.5			248.9	557.4	242.9	79.5	1.000055
47500.0	142.6	-69.4			243.8	556.1	243.1	73.9	1.000054
48000.0	139.0	-69.0			237.3	556.6	243.1	68.4	1.000053
48500.0	135.6	-67.3			229.4	559.0	242.1	64.2	1.000051
49000.0	132.2	-65.5			221.9	561.3	240.8	60.0	1.000049
49500.0	129.0	-65.3			216.2	561.6	238.0	58.7	1.000048
50000.0	125.8	-65.8			211.3	561.0	234.8	57.9	1.000047
50500.0	122.7	-66.8			207.0	559.7	231.6	56.4	1.000046
51000.0	119.6	-67.9			203.0	558.1	228.0	54.1	1.000045
51500.0	116.6	-69.0			199.0	556.6	224.2	52.1	1.000044
52000.0	113.7	-70.1			195.1	555.1	220.6	46.8	1.000043
52500.0	110.9	-70.5			190.5	554.6	216.1	41.4	1.000042
53000.0	108.1	-70.2			185.5	555.0	211.8	36.3	1.000041
53500.0	105.3	-70.0			180.6	555.3	208.1	31.3	1.000040
54000.0	102.7	-69.7			175.9	555.6	205.4	27.8	1.000039
54500.0	100.1	-69.5			171.3	555.9	206.2	26.4	1.000038
55000.0	97.6	-69.1			166.6	556.5	207.2	25.4	1.000037
55500.0	95.2	-68.7			162.1	557.1	208.4	25.4	1.000036
56000.0	92.8	-65.0			155.3	562.1	209.7	25.4	1.000035
56500.0	90.5	-64.1			150.9	563.3	212.1	25.2	1.000034
57000.0	88.3	-64.0			147.1	563.4	214.6	25.0	1.000033
57500.0	86.2	-63.2			143.0	564.4	218.0	23.9	1.000032
58000.0	84.1	-61.7			138.5	566.5	221.8	22.8	1.000031
58500.0	82.1	-61.4			135.0	566.9	223.2	19.4	1.000030
59000.0	80.1	-61.2			131.6	567.2	223.8	15.1	1.000029
59500.0	78.2	-61.0			128.3	567.5	222.8	10.6	1.000029
60000.0	76.3	-60.8			125.1	567.6	216.7	5.9	1.000028
60500.0	74.4	-60.5			122.0	568.0	186.2	2.0	1.000027
61000.0	72.6	-60.3			118.9	568.3	125.8	1.3	1.000026
61500.0	70.9	-60.1			115.9	568.6	80.5	2.4	1.000026
62000.0	69.2	-59.9			113.0	569.0	90.0	1.8	1.000025
62500.0	67.6	-59.6			110.2	569.3	144.6	1.0	1.000025
63000.0	66.0	-59.3			107.4	569.7	214.3	2.9	1.000024

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 468

UPPER AIR DATA
273002046B
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE II Con't

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
63500.0	64.4	-59.8			104.7	570.1	227.5	7.7	1.000023
64000.0	62.9	-58.7			102.1	570.5	230.6	12.5	1.000023
64500.0	61.4	-58.4			99.6	570.9	229.8	9.8	1.000022
65000.0	59.9	-58.1			97.1	571.3	228.3	6.9	1.000022
65500.0	58.5	-57.8			94.6	571.7	222.4	5.0	1.000021
66000.0	57.1	-57.5			92.3	572.1	211.3	4.4	1.000021
66500.0	55.8	-57.2			90.0	572.5	197.4	4.0	1.000020
67000.0	54.4	-56.9			87.7	572.8	169.6	3.2	1.000020
67500.0	53.1	-56.6			85.5	573.2	134.6	3.3	1.000019
68000.0	51.9	-56.3			83.4	573.6	104.3	5.0	1.000019
68500.0	50.6	-56.1			81.3	574.0	88.0	8.1	1.000018
69000.0	49.5	-55.8			79.3	574.3	81.0	11.4	1.000018
69500.0	48.3	-55.7			77.4	574.5	90.6	10.7	1.000017
70000.0	47.2	-55.5			75.5	574.7	102.4	10.2	1.000017
70500.0	46.1	-55.3			73.7	575.0	110.0	10.3	1.000016
71000.0	45.0	-55.2			71.9	575.2	102.8	11.0	1.000016
71500.0	44.0	-55.0			70.2	575.4	96.5	11.9	1.000016
72000.0	42.9	-54.9			68.5	575.6	93.1	12.0	1.000015
72500.0	41.9	-54.7			66.9	575.8	91.2	11.4	1.000015
73000.0	41.0	-54.5			65.3	576.0	89.2	10.8	1.000015
73500.0	40.0	-54.4			63.7	576.2	85.8	11.4	1.000014
74000.0	39.1	-54.2			62.2	576.4	82.7	12.1	1.000014
74500.0	38.2	-54.0			60.7	576.7	81.5	13.0	1.000014
75000.0	37.3	-53.9			59.2	576.9	91.0	14.4	1.000013
75500.0	36.4	-53.7			57.8	577.1	98.6	16.1	1.000013
76000.0	35.6	-53.6			56.4	577.3	104.8	17.1	1.000013
76500.0	34.7	-53.4			55.0	577.5	110.9	16.9	1.000012
77000.0	33.9	-53.2			53.7	577.7	117.1	16.8	1.000012
77500.0	33.1	-53.1			52.4	577.9	120.7	15.5	1.000012
78000.0	32.4	-52.9			51.2	578.1	122.1	12.8	1.000011
78500.0	31.6	-52.8			49.9	578.4	124.4	10.1	1.000011
79000.0	30.9	-52.6			48.7	578.6	120.9	8.5	1.000011
79500.0	30.1	-52.4			47.6	578.8	112.2	7.5	1.000011
80000.0	29.5	-52.1			46.4	579.3	101.3	6.8	1.000010
80500.0	28.8	-51.6			45.3	579.8	93.9	7.1	1.000010
81000.0	28.1	-51.2			44.1	580.4	88.8	7.7	1.000010
81500.0	27.5	-50.8			43.0	580.9	84.4	8.4	1.000010
82000.0	26.8	-50.4			42.0	581.4	75.1	7.5	1.000009
82500.0	26.2	-50.0			40.9	582.0	61.7	6.6	1.000009
83000.0	25.6	-49.6			39.9	582.5	45.5	6.2	1.000009

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83
ASCENSION NO. 468 1406 MDT

UPPER AIR DATA
2730020468
WHITE SANDS

TABLE 11 Con't

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

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
83500.0	25.0	-49.1			38.9	583.1	35.2	7.1	1.000009
84000.0	24.5	-48.7			38.0	583.6	27.9	8.3	1.000008
84500.0	23.9	-48.8			37.1	583.6	22.5	9.6	1.000008
85000.0	23.4	-49.0			36.3	583.3	25.1	9.2	1.000008
85500.0	22.8	-49.2			35.5	583.0	28.2	8.8	1.000008
86000.0	22.3	-49.4			34.7	582.7	31.7	8.4	1.000008
86500.0	21.8	-49.5			34.0	582.6	50.0	8.3	1.000008
87000.0	21.3	-48.9			33.1	583.3	68.2	9.2	1.000007
87500.0	20.8	-48.4			32.3	584.1	82.2	10.7	1.000007
88000.0	20.4	-47.8			31.5	584.8	98.4	11.7	1.000007
88500.0	19.9	-47.4			30.7	585.4	112.6	13.3	1.000007
89000.0	19.4	-47.3			30.0	585.5	123.2	15.5	1.000007
89500.0	19.0	-47.1			29.3	585.7	129.0	14.2	1.000007
90000.0	18.6	-47.0			28.6	585.8	135.5	11.9	1.000006
90500.0	18.2	-46.9			28.0	586.0	145.1	9.8	1.000006
91000.0	17.8	-46.8			27.3	586.1	146.0	8.7	1.000006
91500.0	17.4	-46.7			26.7	586.3	140.7	7.9	1.000006
92000.0	17.0	-46.5			26.1	586.4	134.5	7.3	1.000006
92500.0	16.6	-46.4			25.5	586.6			1.000006
93000.0	16.2	-46.3			24.9	586.8			1.000006
93500.0	15.8	-46.2			24.3	586.9			1.000005
94000.0	15.5	-46.1			23.8	587.1			1.000005
94500.0	15.1	-46.0			23.2	587.2			1.000005
95000.0	14.8	-45.8			22.7	587.4			1.000005

STATION ALTITUDE 3989.00 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 468

MANDATORY LEVELS
2730020468
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 12

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.	4993.	22.2	13.5	58.	213.5	12.3
800.0	6711.	17.1	12.8	75.	218.3	11.1
750.0	8507.	12.4	9.9	85.	208.2	12.9
700.0	10397.	8.5	4.5	76.	213.0	21.9
650.0	12397.	4.8	1.3	78.	210.1	25.6
600.0	14524.	.2	-3.5	76.	206.3	28.7
550.0	16796.	-4.8	-5.8	93.	215.5	25.0
500.0	19244.	-7.6	-13.8	61.	224.9	32.7
450.0	21908.	-13.5	-17.3	73.	219.4	46.4
400.0	24820.	-19.5	-22.3	78.	213.6	29.6
350.0	28038.	-25.6	-33.8	46.	223.9	22.0
300.0	31652.	-33.4	-42.8	38.	227.8	41.8
250.0	35757.	-44.3			224.4	53.1
200.0	40535.	-55.1			236.1	85.4
175.0	43291.	-61.7			238.9	86.4
150.0	46374.	-67.5			242.4	83.0
125.0	49880.	-65.9			234.2	57.7
100.0	54353.	-69.5			206.2	26.4
80.0	58322.	-61.2			223.7	15.2
70.0	61550.	-60.0			79.3	2.4
60.0	58721.	-58.1			228.6	7.3
50.0	68508.	-55.9			84.1	9.6
40.0	73183.	-54.4			86.2	11.3
30.0	79259.	-52.4			111.0	7.4
25.0	83155.	-49.1			35.4	7.1
20.0	87966.	-47.4			108.4	12.7
15.0	94228.	-45.9				

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

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 240

SIGNIFICANT LEVEL DATA
2730010240
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
876.6	4126.6	24.3	23.1	93.0
865.4	4496.9	21.9	18.1	79.0
861.4	4629.6	22.1	17.0	73.0
860.0	4676.0	19.7	13.2	66.0
782.8	7315.4	13.4	12.8	96.0
700.0	10382.4	7.3	5.0	74.0
633.3	13069.9	1.9	.1	88.0
589.5	14960.0	-2.0	-6.4	72.0
554.7	16549.1	-3.1	-8.0	69.0
548.7	16832.7	-2.9	-10.0	58.0
523.6	18048.1	-5.2	-16.1	42.0
500.0	19235.0	-7.3	-20.1	35.0
464.5	21109.4	-11.1	-19.2	51.0
450.0	21908.8	-12.4	-23.7	38.0
434.6	22780.4	-14.7	-24.7	42.0
426.8	23231.0	-15.6	-23.0	53.0
414.5	23956.2	-16.3	-27.0	39.0
400.0	24834.5	-18.4	-28.6	40.0
362.7	27216.0	-23.3	-34.1	36.0
344.5	28447.2	-27.0	-35.1	49.0
322.7	29985.1	-31.4	-37.1	57.0
300.0	31676.7	-34.0	-42.2	43.0
273.5	33788.3	-38.9	-47.6	39.0
250.0	35796.8	-43.9		
213.3	39236.6	-53.3		
200.0	40596.2	-55.4		
165.0	44567.5	-63.2		
150.0	46487.4	-65.9		
123.5	50361.0	-67.8		
112.2	52252.8	-70.4		
100.0	54513.2	-69.5		
81.7	58573.1	-61.2		
70.0	61756.6	-59.1		
55.2	66714.1	-55.7		
50.0	68792.2	-56.5		
36.6	75749.1	-55.6		
30.0	79570.0	-52.4		
22.3	85962.7	-49.1		
20.0	88341.9	-46.3		
16.2	92983.9	-45.7		

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83
ASCENSION NO. 240 1406 MDT

UPPER AIR DATA
2730010240
HOLLOMAN

TABLE 13

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

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
4126.6	876.6	24.3	23.1	93.0	1014.1	676.0	190.0	8.0	1.000347
4500.0	865.3	21.9	18.1	79.9	1012.4	672.2	187.9	8.7	1.000316
5000.0	850.1	18.9	13.3	69.7	1007.1	668.1	185.5	9.7	1.000292
5500.0	835.1	17.7	13.3	75.4	993.2	666.8	183.6	10.8	1.000290
6000.0	820.4	16.5	13.3	81.0	979.6	665.4	182.0	11.8	1.000287
6500.0	805.9	15.3	13.1	86.7	966.2	664.1	179.8	11.0	1.000284
7000.0	791.6	14.2	12.9	92.4	953.0	662.7	176.8	9.8	1.000281
7500.0	777.5	13.0	12.2	98.7	939.9	661.3	184.2	10.1	1.000275
8000.0	763.5	12.0	10.6	91.1	926.7	660.0	192.1	10.8	1.000266
8500.0	749.7	11.0	9.1	87.5	913.7	658.7	189.6	12.6	1.000258
9000.0	736.2	10.0	7.5	83.9	900.8	657.4	186.8	14.7	1.000250
9500.0	722.9	9.1	5.9	80.3	888.0	656.0	186.5	17.1	1.000242
10000.0	709.8	8.1	4.2	76.7	875.5	654.7	186.6	19.4	1.000235
10500.0	696.9	7.1	2.9	74.6	862.9	653.5	188.6	20.8	1.000229
11000.0	684.1	6.1	2.4	77.2	850.1	652.3	190.4	22.2	1.000225
11500.0	671.4	5.1	1.9	79.8	837.5	651.1	191.2	23.0	1.000221
12000.0	659.1	4.0	1.3	82.4	825.1	649.9	191.9	23.8	1.000217
12500.0	646.9	3.0	.8	85.0	812.8	648.7	193.4	25.2	1.000213
13000.0	635.0	2.0	.2	87.6	800.8	647.5	194.8	26.8	1.000209
13500.0	623.1	1.0	-1.3	84.4	789.0	646.1	198.3	28.6	1.000204
14000.0	611.4	-.0	-3.0	80.1	777.4	644.8	202.1	30.[illegible]	1.000198
14500.0	599.9	-1.1	-4.7	75.9	765.9	643.5	204.5	32.4	1.000193
15000.0	588.6	-2.0	-6.4	71.9	754.4	642.3	206.3	34.1	1.000188
15500.0	577.4	-2.4	-6.9	71.0	741.1	641.8	207.0	34.7	1.000184
16000.0	566.5	-2.7	-7.4	70.0	728.0	641.4	206.9	34.3	1.000180
16500.0	555.7	-3.1	-7.9	69.1	715.2	641.0	207.1	33.6	1.000177
17000.0	545.2	-3.2	-10.8	55.8	702.3	640.7	208.0	32.3	1.000170
17500.0	534.8	-4.2	-13.2	49.2	691.5	639.4	209.1	31.2	1.000166
18000.0	524.6	-5.1	-15.8	42.6	680.9	638.2	210.3	31.6	1.000161
18500.0	514.5	-6.0	-17.6	39.3	670.1	637.1	211.5	31.9	1.000157
19000.0	504.6	-6.9	-19.3	36.4	659.5	636.0	212.8	34.0	1.000154
19500.0	494.8	-7.8	-19.9	37.3	649.1	634.9	213.9	36.2	1.000151
20000.0	485.2	-8.9	-19.5	41.5	638.9	633.7	217.3	37.8	1.000149
20500.0	475.8	-9.9	-19.3	45.8	628.8	632.5	221.3	39.4	1.000147
21000.0	466.5	-10.9	-19.2	50.1	619.0	631.3	224.9	41.2	1.000145
21500.0	457.4	-11.7	-21.3	44.6	608.9	630.2	228.8	41.2	1.000142
22000.0	448.4	-12.6	-23.8	38.4	599.1	629.0	232.7	41.3	1.000138
22500.0	439.5	-14.0	-24.4	40.7	590.3	627.4	235.8	41.4	1.000136
23000.0	430.8	-15.1	-23.6	47.4	581.2	626.0	238.1	41.5	1.000135
23500.0	422.2	-15.9	-24.4	47.8	571.2	625.1	238.8	42.9	1.000132

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 240

UPPER AIR DATA
2730010240
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 14 Con't

GEOMETRIC 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
24000.0	413.8	-16.4	-27.1	39.0	561.1	624.4	238.3	45.4	1.000129
24500.0	405.5	-17.6	-28.0	39.6	552.5	623.0	237.6	46.8	1.000127
25000.0	397.3	-18.7	-29.0	39.7	543.7	621.5	236.4	46.4	1.000124
25500.0	389.2	-19.8	-30.2	38.9	534.9	620.3	235.2	45.8	1.000122
26000.0	381.3	-20.8	-31.3	38.0	526.1	619.0	234.9	43.3	1.000120
26500.0	373.5	-21.8	-32.5	37.2	517.6	617.7	234.4	40.9	1.000118
27000.0	365.9	-22.9	-33.6	36.4	509.1	616.5	233.1	39.6	1.000116
27500.0	358.4	-24.2	-34.3	38.3	501.3	614.8	231.5	38.5	1.000114
28000.0	351.0	-25.7	-34.6	42.4	493.9	613.0	230.1	38.1	1.000112
28500.0	343.7	-27.2	-35.1	46.4	486.6	611.1	228.7	38.0	1.000110
29000.0	336.5	-28.6	-35.7	50.0	479.2	609.3	227.4	38.2	1.000109
29500.0	329.4	-30.0	-36.4	53.5	471.8	607.6	226.4	38.7	1.000107
30000.0	322.5	-31.4	-37.1	56.9	464.6	605.8	225.3	39.2	1.000105
30500.0	315.6	-32.2	-38.6	52.7	456.2	604.8	225.4	38.6	1.000103
31000.0	308.9	-33.0	-40.1	48.6	447.9	603.8	225.6	37.7	1.000101
31500.0	302.3	-33.7	-41.6	44.5	439.8	602.9	225.7	37.3	1.000099
32000.0	295.8	-34.8	-43.0	42.4	432.1	601.6	225.5	37.8	1.000097
32500.0	289.4	-35.9	-44.3	41.4	424.9	600.1	225.4	38.3	1.000095
33000.0	283.1	-37.1	-45.5	40.5	417.7	598.6	224.1	41.0	1.000094
33500.0	277.0	-38.2	-46.8	39.5	410.7	597.1	222.9	44.1	1.000092
34000.0	270.9	-39.4	-49.0	34.9**	403.8	595.6	222.2	47.2	1.000090
34500.0	264.9	-40.7	-52.9	25.2**	397.0	594.0	222.5	50.4	1.000089
35000.0	259.1	-41.9	-57.9	15.5**	390.3	592.4	222.8	53.7	1.000087
35500.0	253.3	-43.2	-66.3	5.8**	383.7	590.8	223.6	55.3	1.000086
36000.0	247.7	-44.5			377.3	589.1	224.6	56.5	1.000084
36500.0	242.0	-45.8			370.9	587.4	225.5	57.7	1.000083
37000.0	236.5	-47.2			364.6	585.6	226.1	58.2	1.000081
37500.0	231.1	-48.6			358.5	583.8	226.7	58.6	1.000080
38000.0	225.8	-49.9			352.4	582.1	227.5	60.0	1.000078
38500.0	220.7	-51.3			346.5	580.3	229.3	64.1	1.000077
39000.0	215.6	-52.7			340.7	578.5	230.9	68.4	1.000076
39500.0	210.7	-53.7			334.4	577.1	232.7	72.7	1.000074
40000.0	205.7	-54.5			327.7	576.1	234.5	77.2	1.000073
40500.0	200.9	-55.3			321.2	575.1	236.2	81.7	1.000072
41000.0	196.1	-56.2			314.9	573.8	236.9	83.2	1.000070
41500.0	191.4	-57.2			308.8	572.5	237.5	84.6	1.000069
42000.0	186.9	-58.2			302.8	571.2	237.5	86.9	1.000067
42500.0	182.4	-59.1			296.9	569.9	237.3	89.6	1.000066
43000.0	178.0	-60.1			291.1	568.6	237.3	91.5	1.000065
43500.0	173.8	-61.1			285.5	567.3	237.5	92.5	1.000064

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

UPPER AIR DATA
2730010240
HOLLOMAN

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83
ASCENSION NO. 240 1406 MDT

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 14 Con't

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
44000.0	169.6	-62.1			279.9	566.0	237.7	93.4	1.000062
44500.0	165.5	-63.1			274.5	564.7	238.2	93.0	1.000061
45000.0	161.5	-63.8			268.7	563.7	238.9	92.3	1.000060
45500.0	157.5	-64.5			263.0	562.7	239.5	90.7	1.000059
46000.0	153.7	-65.2			257.5	561.8	240.1	85.3	1.000057
46500.0	149.9	-65.9			252.0	560.8	240.7	79.8	1.000056
47000.0	146.2	-66.2			246.0	560.5	241.3	73.1	1.000055
47500.0	142.6	-66.4			240.2	560.2	241.7	65.5	1.000053
48000.0	139.0	-66.6			234.5	559.8	242.3	57.9	1.000052
48500.0	135.6	-66.9			229.0	559.5	242.2	55.4	1.000051
49000.0	132.2	-67.1			223.6	559.2	242.0	53.1	1.000050
49500.0	129.0	-67.4			218.3	558.8	241.3	50.7	1.000049
50000.0	125.8	-67.6			213.2	558.5	236.1	48.1	1.000047
50500.0	122.6	-68.0			208.2	558.0	234.5	45.7	1.000046
51000.0	119.6	-68.7			203.7	557.1	230.3	43.5	1.000045
51500.0	116.6	-69.4			199.3	556.1	225.0	41.4	1.000044
52000.0	113.6	-70.1			194.9	555.2	219.2	39.7	1.000043
52500.0	110.8	-70.3			190.3	554.9	214.8	38.4	1.000042
53000.0	108.0	-70.1			185.3	555.1	212.4	37.3	1.000041
53500.0	105.3	-69.9			180.5	555.4	209.9	36.3	1.000040
54000.0	102.6	-69.7			175.8	555.7	209.4	34.7	1.000039
54500.0	100.1	-69.5			171.2	555.9	209.3	32.9	1.000038
55000.0	97.6	-68.5			166.2	557.3	209.6	31.1	1.000037
55500.0	95.2	-67.5			161.3	558.7	211.9	28.7	1.000036
56000.0	92.9	-66.5			156.5	560.1	214.6	26.4	1.000035
56500.0	90.6	-65.4			151.9	561.5	216.9	26.8	1.000034
57000.0	88.4	-64.4			147.5	562.8	218.6	28.4	1.000033
57500.0	86.2	-63.4			143.1	564.2	220.1	29.7	1.000032
58000.0	84.1	-62.4			138.9	565.6	221.4	30.1	1.000031
58500.0	82.0	-61.3			134.9	567.0	222.7	30.5	1.000030
59000.0	80.0	-60.9			131.4	567.5	224.4	25.1	1.000029
59500.0	78.1	-60.6			128.0	568.0	227.5	17.8	1.000029
60000.0	76.2	-60.3			124.7	568.4	234.8	10.7	1.000028
60500.0	74.4	-59.9			121.6	568.9	232.2	6.9	1.000027
61000.0	72.6	-59.6			118.5	569.3	223.1	3.1	1.000026
61500.0	70.9	-59.3			115.4	569.7	179.9	1.5	1.000026
62000.0	69.2	-58.9			112.5	570.2	198.8	4.3	1.000025
62500.0	67.6	-58.6			109.7	570.7	202.6	7.2	1.000024
63000.0	66.0	-58.2			106.9	571.1	205.7	10.1	1.000024
63500.0	64.4	-57.9			104.2	571.6	208.7	13.0	1.000023

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 240

UPPER AIR DATA
2730010240
HOLLOMAN

TABLE 14 Con't

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE 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
64000.0	62.9	-57.6			101.6	572.6	210.6	15.9	1.000023
64500.0	61.4	-57.2			99.0	572.5	213.8	15.4	1.000022
65000.0	59.9	-56.9			96.5	572.9	217.4	14.8	1.000021
65500.0	58.5	-56.5			94.1	573.4	224.5	10.6	1.000021
66000.0	57.1	-56.2			91.7	573.8	264.3	4.1	1.000020
66500.0	55.8	-55.8			89.4	574.3	354.2	6.3	1.000020
67000.0	54.5	-55.8			87.3	574.3	20.0	8.2	1.000019
67500.0	53.2	-56.0			85.3	574.1	34.4	11.0	1.000019
68000.0	51.9	-56.2			83.4	573.8	51.4	10.5	1.000019
68500.0	50.7	-56.4			81.5	573.6	79.2	9.6	1.000018
69000.0	49.5	-56.5			79.6	573.5	104.6	10.7	1.000018
69500.0	48.3	-56.4			77.7	573.6	119.1	10.3	1.000017
70000.0	47.2	-56.3			75.8	573.6	134.0	10.5	1.000017
70500.0	46.1	-56.3			74.0	573.7	140.7	10.2	1.000016
71000.0	45.0	-56.2			72.3	573.8	141.1	9.0	1.000016
71500.0	44.0	-56.1			70.6	573.9	141.5	7.7	1.000016
72000.0	42.9	-56.1			68.9	574.0	123.3	8.4	1.000015
72500.0	41.9	-56.0			67.2	574.1	108.5	9.9	1.000015
73000.0	40.9	-55.9			65.6	574.2	101.2	11.3	1.000015
73500.0	40.0	-55.9			64.1	574.3	100.2	11.8	1.000014
74000.0	39.0	-55.8			62.5	574.4	99.3	12.2	1.000014
74500.0	38.1	-55.7			61.1	574.5	100.4	12.6	1.000014
75000.0	37.2	-55.6			59.6	574.5	101.9	12.9	1.000013
75500.0	36.3	-55.5			58.2	574.8	103.1	13.2	1.000013
76000.0	35.5	-55.1			56.7	575.3	103.0	13.4	1.000013
76500.0	34.7	-54.7			55.3	575.8	102.9	13.5	1.000012
77000.0	33.9	-54.3			53.9	576.3	104.6	13.7	1.000012
77500.0	33.3	-54.0			52.6	576.8	108.2	14.0	1.000012
78000.0	32.3	-53.6			51.3	577.3	111.7	14.4	1.000011
78500.0	31.6	-53.2			50.0	577.8	111.4	13.5	1.000011
79000.0	30.8	-52.8			48.7	578.3	109.7	12.1	1.000011
79500.0	30.1	-52.5			47.5	578.8	106.8	10.6	1.000011
80000.0	29.4	-52.2			46.4	579.1	93.0	7.7	1.000010
80500.0	28.7	-51.9			45.2	579.5	66.5	5.7	1.000010
81000.0	28.1	-51.7			44.2	579.6	45.5	5.6	1.000010
81500.0	27.4	-51.4			43.1	580.1	50.9	6.1	1.000010
82000.0	26.8	-51.1			42.1	580.5	55.4	6.7	1.000009
82500.0	26.2	-50.9			41.0	580.8	61.0	6.6	1.000009
83000.0	25.6	-50.6			40.1	581.1	68.3	6.2	1.000009
83500.0	25.0	-50.4			39.1	581.5	76.4	5.9	1.000009

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 240

UPPER AIR DATA
2730010240
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 13 Cont'd

GEOMETRIC 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
84000.0	24.4	-50.1			38.2	581.8	70.9	5.7	1.000008
84500.0	23.9	-49.9			37.2	582.1	64.7	5.5	1.000008
85000.0	23.3	-49.6			36.3	582.5	61.4	5.1	1.000008
85500.0	22.8	-49.3			35.5	582.8	65.0	4.3	1.000008
86000.0	22.3	-49.1			34.6	583.2	70.3	3.5	1.000008
86500.0	21.8	-48.5			33.7	584.0	69.0	4.7	1.000008
87000.0	21.3	-47.9			32.9	584.7	66.6	6.6	1.000007
87500.0	20.8	-47.3			32.1	585.5	66.2	8.4	1.000007
88000.0	20.3	-46.7			31.3	586.2	85.2	9.4	1.000007
88500.0	19.9	-46.5			30.5	586.8	99.3	11.3	1.000007
89000.0	19.4	-46.2			29.8	586.9	106.0	12.6	1.000007
89500.0	19.0	-46.2			29.1	587.0	106.2	12.6	1.000006
90000.0	18.5	-46.1			28.5	587.0	106.5	12.5	1.000006
90500.0	18.1	-46.0			27.8	587.1	104.5	11.3	1.000006
91000.0	17.7	-46.0			27.2	587.2	100.7	9.7	1.000006
91500.0	17.3	-45.9			26.6	587.3	95.3	8.1	1.000006
92000.0	16.9	-45.8			26.0	587.4			1.000006
92500.0	16.6	-45.8			25.4	587.5			1.000006

STATION ALTITUDE 4126.59 FEET MSL
30 SEP. 83
ASCENSION NO. 240

MANDATORY LEVELS
2730010240
HOLLOMAN

TABLE 15

GEOMETIC COORDINATES
32.88865 LAT DEG
106.09365 LON DEG

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	5004.	18.9	13.3	78.	185.5	9.8
800.0	6705.	14.9	13.1	89.	178.6	10.5
750.0	8491.	11.1	9.1	88.	189.7	12.6
700.0	10373.	7.3	5.0	74.	188.1	20.4
650.0	12363.	3.3	.9	84.	193.0	24.8
600.0	14499.	-1.0	-4.7	76.	204.5	32.4
550.0	16750.	-2.9	-9.5	60.	207.6	32.9
500.0	19200.	-7.3	-20.1	35.	213.3	35.0
450.0	21876.	-12.4	-23.7	38.	231.9	41.3
400.0	24794.	-18.4	-28.6	40.	236.8	46.5
350.0	28020.	-25.9	-34.7	43.	229.9	38.1
300.0	31614.	-34.0	-42.2	43.	225.7	37.5
250.0	35719.	-43.9			224.2	56.0
200.0	40499.	-55.4			236.3	82.0
175.0	43258.	-60.8			237.4	92.2
150.0	46363.	-65.9			240.7	80.2
125.0	49979.	-67.7			237.4	47.6
100.0	54346.	-69.5			209.3	32.9
80.0	58811.	-60.9			224.3	25.5
70.0	61546.	-59.1			197.3	2.7
60.0	64733.	-56.9			216.9	14.9
50.0	68535.	-56.5			93.8	10.1
40.0	73187.	-55.9			100.3	11.7
30.0	79271.	-52.4			106.2	10.4
25.0	83117.	-50.4			75.5	5.9
20.0	87929.	-46.3			94.3	10.5

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

[illegible] LEVEL DATA

[illegible]

[illegible]

[illegible]

STATION ALTITUDE 4951.00 FEET MSL
30 SEP. 63 1406 MDT
ASCENSION NO. 149

SIGNIFICANT LEVEL DATA
27000030145
UNITED

GEODETIC COORDINATES
33.16711 LAT DEG
106.49511 LON DEG

TABLE 16 Con't

PRESSURE MILLIBARS	GEOPOTENTIAL ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
50.0	68684.4	-56.8		
37.3	74030.0	-56.0		

STATION [illegible] 30 SEP. 83 1406 MDT
ASCENSION [illegible] 145

[illegible] DATA
27500[illegible]145
DALLES

GEODETIC COORDINATES
33.[illegible] LAT [illegible]
106.[illegible] LON [illegible]

TABLE 17

GEOMETRIC ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	RELATIVE HUMIDITY PERCENT	SPECIFIC HUMIDITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4851.0	975.[illegible]	21.7	17.1	75.0	1023.4	671.6	.0	.0	1.000314
4500.0	964.[illegible]	17.[illegible]	17.0	79.8	1021.4	669.1	[illegible]	2.0	1.000303
5000.0	949.7	17.[illegible]	13.1	72.[illegible]	1010.8	[illegible]	[illegible]	5.8	1.000297
5500.0	934.7	17.2	12.6	35.3	[illegible]	666.0	[illegible]	8.5	1.000288
6000.0	920.[illegible]	15.7	11.3	70.0	[illegible]	665.3	[illegible]	11.3	1.000279
6500.0	905.5	15.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.6	1.000[illegible]
7000.0	891.1	14.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.7	1.000[illegible]
7500.0	876.[illegible]	13.9	[illegible]	79.9	990.6	660.8	[illegible]	13.9	1.000261
8000.0	862.0	11.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14.3	1.000253
8500.0	849.3	10.[illegible]	[illegible]	[illegible]	975.6	657.3	[illegible]	14.3	1.000255
9000.0	835.7	[illegible]	7.4	[illegible]	963.5	[illegible]	[illegible]	15.[illegible]	1.000251
9500.0	822.5	7.5	[illegible]	[illegible]	951.7	[illegible]	[illegible]	17.9	1.000246
10000.0	809.2	[illegible]	[illegible]	98.0	938.5	655.4	[illegible]	21.0	1.000241
10500.0	796.2	[illegible]	5.0	[illegible]	924.6	652.5	[illegible]	24.5	1.000235
11000.0	783.3	5.1	4.1	93.0	911.6	651.3	[illegible]	27.3	1.000230
11500.0	770.3	4.5	3.5	[illegible]	[illegible]	[illegible]	[illegible]	29.8	1.000225
12000.0	757.3	4.0	3.3	[illegible]	884.0	650.0	[illegible]	[illegible]	1.000222
12500.0	746.1	2.8	[illegible]	96.7	872.3	648.5	[illegible]	[illegible]	1.000211
13000.0	734.1	1.5	1.1	97.4	861.2	646.9	[illegible]	35.5	1.000212
13500.0	722.2	.5	.0	98.0	849.7	645.4	[illegible]	37.9	1.000207
14000.0	710.4	-.4	-.7	97.9	838.9	644.5	[illegible]	40.3	1.000203
14500.0	698.6	-1.2	-1.5	97.8	828.3	643.6	[illegible]	41.1	1.000198
15000.0	687.4	-1.9	-2.2	97.7	817.9	642.7	[illegible]	41.[illegible]	1.000194
15500.0	676.2	-2.5	-3.0	97.6	807.7	641.8	[illegible]	40.2	1.000190
16000.0	665.2	-3.4	-3.7	97.5	797.6	640.9	[illegible]	40.7	1.000186
16500.0	654.3	-4.1	-4.5	97.5	787.8	639.9	[illegible]	42.1	1.000182
17000.0	643.4	-4.9	-5.2	97.4	778.2	639.0	[illegible]	44.5	1.000179
17500.0	633.0	-5.6	-6.0	97.[illegible]	768.8	638.1	[illegible]	43.9	1.000175
18000.0	622.6	-6.3	-6.7	97.2	759.6	637.2	[illegible]	42.9	1.000172
18500.0	612.4	-7.1	-7.5	97.1	750.5	636.3	[illegible]	42.0	1.000168
19000.0	602.7	-7.8	-8.2	97.0	739.6	635.4	[illegible]	41.7	1.000165
19500.0	592.8	-8.5	-9.1	95.9	728.9	634.4	[illegible]	41.9	1.000161
20000.0	584.4	-9.4	-10.2	94.2	718.4	633.4	[illegible]	42.0	1.000158
20500.0	574.4	-11.2	-13.6	75.7	630.5	631.1	[illegible]	41.2	1.000151
21000.0	565.5	-12.2	-15.7	75.2	620.5	629.8	[illegible]	41.0	1.000148
21500.0	555.3	-13.3	-16.8	74.7	610.8	628.5	[illegible]	41.4	1.000145
22000.0	547.3	-14.3	-17.9	74.1	601.2	627.2	[illegible]	43.8	1.000142
22500.0	538.4	-15.4	-19.0	73.6	591.7	625.9	[illegible]	45.2	1.000140
23000.0	529.7	-16.9	-20.1	73.1	582.5	624.6	[illegible]	46.5	1.000137
23500.0	521.2	-17.2	-19.6	71.4	[illegible]	623.6	[illegible]	47.8	1.000135

STATION ALTITUDE 5051.00 FEET MSL
30 SEP. 83
ASCENSION NO. 195 1406 MDT

DEPP - AIR DATA
2730030145
JALEEN

GEOPETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 17 Con't

GEOMETRIC 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
24000.0	412.7	-19.6	-20.7	79.3	562.[illegible]	622.6	227.0	49.0	1.000132
24500.0	404.4	-18.9	-22.8	70.6	553.5	621.5	227.5	50.1	1.000129
25000.0	396.2	-19.8	-24.2	67.5	544.3	620.4	228.1	51.0	1.000126
25500.0	388.2	-20.8	-24.7	70.6	535.5	619.1	228.7	51.2	1.000124
26000.0	380.2	-22.1	-26.4	64.3	527.2	617.5	229.4	51.0	1.000121
26500.0	372.4	-23.4	-30.7	50.6	519.2	615.8	229.6	51.4	1.000118
27000.0	364.7	-24.7	-35.2	37.0	511.3	614.1	230.1	52.1	1.000116
27500.0	357.2	-26.1	-40.8	23.3	503.6	612.4	229.9	53.5	1.000113
28000.0	349.8	-27.2	-46.1	14.6	495.4	611.0	229.5	55.0	1.000111
28500.0	342.5	-27.6	-45.3	16.5	485.8	610.5	228.4	55.3	1.000109
29000.0	335.3	-28.7	-43.4	22.5	477.8	609.1	227.2	55.0	1.000107
29500.0	328.2	-29.9	-42.2	28.5	469.9	607.7	225.3	52.1	1.000106
30000.0	321.3	-31.0	-41.5	34.5	462.1	606.3	223.3	46.6	1.000104
30500.0	314.5	-32.1	-41.0	40.5	454.5	604.9	221.1	44.3	1.000102
31000.0	307.8	-33.4	-42.7	38.4	447.1	603.3	219.2	41.8	1.000100
31500.0	301.2	-34.7	-44.5	35.5	439.9	601.7	217.7	40.2	1.000099
32000.0	294.7	-35.7	-45.1	36.9	432.2	600.4	217.0	40.5	1.000097
32500.0	288.3	-36.8	-45.4	39.2	424.5	599.3	216.5	41.4	1.000095
33000.0	282.0	-37.6	-46.2	39.4**	417.1	598.0	216.6	44.6	1.000094
33500.0	275.6	-38.9	-49.3	32.1**	410.2	596.3	216.9	47.7	1.000092
34000.0	269.7	-40.3	-52.6	24.8**	403.4	594.5	217.6	50.9	1.000090
34500.0	263.8	-41.6	-56.8	17.5**	396.8	592.8	218.3	53.7	1.000089
35000.0	257.9	-42.9	-61.9	10.2**	390.3	591.1	219.4	55.6	1.000087
35500.0	252.2	-44.3	-71.3	2.9**	383.9	589.4	220.4	57.5	1.000086
36000.0	246.6	-45.6			377.4	587.7	221.5	59.2	1.000084
36500.0	240.9	-46.8			370.9	586.1	222.5	61.2	1.000083
37000.0	235.4	-48.1			364.5	584.4	223.4	63.9	1.000081
37500.0	230.1	-49.4			358.2	582.7	224.2	66.7	1.000080
38000.0	224.8	-50.7			352.1	581.1	224.9	70.3	1.000078
38500.0	219.7	-52.0			346.0	579.4	225.6	73.9	1.000077
39000.0	214.6	-53.1			339.7	578.0	226.5	77.0	1.000076
39500.0	209.6	-53.9			333.1	576.6	227.5	80.1	1.000074
40000.0	204.7	-54.8			326.6	575.6	228.5	82.2	1.000073
40500.0	199.9	-55.7			320.3	574.5	229.5	84.0	1.000071
41000.0	195.1	-56.7			314.0	573.1	230.4	86.5	1.000070
41500.0	190.4	-57.7			307.9	571.8	231.3	89.4	1.000069
42000.0	185.9	-58.7			301.9	570.5	231.7	91.2	1.000067
42500.0	181.4	-59.7			296.0	569.2	232.2	92.7	1.000066
43000.0	177.1	-60.7			290.3	567.9	232.5	93.9	1.000065
43500.0	172.8	-61.7			284.7	566.5	232.5	99.3	1.000063

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

STATION ALTITUDE 5351.60 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 195

UPPER AIR DATA
273030145
JALEEN
TABLE 17 Con't

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL 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
44000.0	166.7	-62.7			279.1	565.2	232.5	103.9	1.000002
44500.0	164.0	-63.6			273.7	563.4	232.9	105.7	1.000061
45000.0	160.6	-64.3			267.9	563.0	233.5	104.2	1.000060
45500.0	156.6	-65.0			262.1	562.1	235.1	96.1	1.000058
46000.0	152.8	-65.5			256.5	561.2	236.6	88.3	1.000057
46500.0	149.0	-66.1			250.8	560.6	233.0	81.0	1.000056
47000.0	145.4	-66.1			244.6	560.6	238.3	77.9	1.000054
47500.0	141.8	-64.2			238.4	563.1	237.9	77.3	1.000053
48000.0	138.3	-64.4			230.8	562.8	237.9	74.7	1.000051
48500.0	134.9	-65.4			226.2	561.5	237.8	71.4	1.000050
49000.0	131.6	-66.4			221.7	560.2	237.0	66.2	1.000049
49500.0	128.3	-67.3			217.2	558.9	235.3	61.1	1.000048
50000.0	125.1	-67.7			212.2	558.3	232.1	56.2	1.000047
50500.0	122.0	-67.6			206.9	558.5	227.9	51.5	1.000046
51000.0	119.0	-67.5			201.6	558.6	222.5	47.1	1.000045
51500.0	116.0	-67.4			196.5	558.7	217.8	45.2	1.000044
52000.0	113.2	-67.3			191.5	558.9	214.0	43.2	1.000043
52500.0	110.3	-67.2			186.7	559.1	212.6	41.6	1.000042
53000.0	107.6	-67.1			181.9	559.3	212.4	40.1	1.000041
53500.0	104.9	-66.9			177.3	559.5	213.5	45.1	1.000039
54000.0	102.3	-67.6			173.5	558.5	215.2	43.7	1.000039
54500.0	99.8	-68.5			169.9	557.3	217.0	40.3	1.000038
55000.0	97.3	-69.3			166.3	556.3	219.2	36.7	1.000037
55500.0	94.9	-68.4			161.4	557.5	220.3	30.5	1.000036
56000.0	92.5	-67.5			156.8	558.7	221.7	25.5	1.000035
56500.0	90.2	-66.6			152.2	559.9	222.3	22.7	1.000034
57000.0	88.0	-65.7			147.6	561.0	223.4	20.0	1.000033
57500.0	85.8	-64.9			143.5	562.2	225.3	17.6	1.000032
58000.0	83.7	-63.1			138.9	564.6	229.4	14.0	1.000031
58500.0	81.7	-60.4			133.8	568.3	233.7	9.6	1.000030
59000.0	79.7	-58.9			129.6	570.3	247.9	8.3	1.000029
59500.0	77.8	-59.4			126.8	569.6	255.0	8.2	1.000028
60000.0	76.0	-59.9			124.1	569.0	253.1	9.4	1.000028
60500.0	74.1	-66.3			121.4	568.3	250.4	10.9	1.000027
61000.0	72.4	-60.8			118.7	567.7	245.7	11.1	1.000026
61500.0	70.6	-61.3			116.1	567.0	240.8	11.3	1.000026
62000.0	68.9	-61.1			113.3	567.2	230.0	11.4	1.000025
62500.0	67.3	-60.6			110.3	568.0	220.1	11.9	1.000025
63000.0	65.7	-60.0			107.4	568.7	212.9	12.5	1.000024
63500.0	64.1	-59.5			104.5	569.5	208.8	13.1	1.000023

STATION ALTITUDE 4951.00 FEET MSL
30 SEP. 83
ASCENSION NO. 145 1406 MDT

UPPER AIR DATA
2730030145
JALLEN

TABLE 17 Con't

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

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
64000.0	62.0	-58.9			101.6	570.2	212.7	13.3	1.000023
64500.0	61.1	-58.3			99.1	571.0	219.1	13.3	1.000022
65000.0	59.7	-57.9			96.5	571.7	230.5	13.2	1.000021
65500.0	58.2	-57.2			93.9	572.5	240.5	12.3	1.000021
66000.0	56.8	-56.7			91.5	573.2	251.9	10.4	1.000020
66500.0	55.5	-56.1			89.1	574.0	262.8	6.5	1.000020
67000.0	54.2	-56.3			87.0	573.7	310.7	2.2	1.000019
67500.0	52.9	-56.4			85.0	573.5	70.1	3.9	1.000019
68000.0	51.7	-56.6			83.1	573.3	86.1	9.1	1.000019
68500.0	50.4	-56.7			81.2	573.1	100.5	10.7	1.000018
69000.0	49.3	-56.8			79.3	573.1	111.8	12.6	1.000018
69500.0	48.1	-56.7			77.4	573.1	119.3	11.3	1.000017
70000.0	47.0	-56.7			75.6	573.2	128.6	10.1	1.000017
70500.0	45.9	-56.6			73.8	573.3	130.7	9.0	1.000016
71000.0	44.8	-56.6			72.0	573.3	132.7	7.8	1.000016
71500.0	43.7	-56.5			70.3	573.4	126.5	9.0	1.000016
72000.0	42.7	-56.5			68.6	573.5	121.3	10.5	1.000015
72500.0	41.7	-56.4			67.0	573.5	116.1	12.3	1.000015
73000.0	40.7	-56.4			65.4	573.6	112.1	14.4	1.000015
73500.0	39.7	-56.3			63.9	573.6			1.000014
74000.0	38.8	-56.3			62.3	573.7			1.000014
74500.0	37.9	-56.2			60.9	573.8			1.000014

STATION ALTITUDE 4051.00 FEET MSL
30 SEP. 83 1406 MDT
ASCENSION NO. 145

MANDATORY LEVELS
2730030145
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 18

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	4996.	17.6	14.1	80.	254.7	5.5
800.0	6685.	15.0	8.6	65.	247.9	13.0
750.0	8468.	10.5	8.2	86.	212.0	14.3
700.0	10342.	6.3	5.3	93.	195.5	23.4
650.0	12330.	3.2	2.7	96.	195.5	32.6
600.0	14445.	-1.1	-1.4	98.	200.2	41.1
550.0	16713.	-4.4	-4.8	97.	211.2	43.2
500.0	19164.	-8.1	-8.5	97.	215.5	41.6
450.0	21823.	-14.0	-17.5	74.	223.5	42.8
400.0	24727.	-19.3	-24.0	66.	227.8	50.5
350.0	27937.	-27.2	-46.0	15.	229.6	55.0
300.0	31530.	-34.9	-44.9	35.	217.5	40.0
250.0	35624.	-44.8			220.8	58.1
200.0	40394.	-55.7			229.4	83.9
175.0	43149.	-61.2			232.5	96.4
150.0	46249.	-66.1			237.6	83.2
125.0	49881.	-67.7			232.0	56.2
100.0	54203.	-68.4			216.8	40.8
80.0	58742.	-58.8			248.7	8.3
70.0	61475.	-61.5			237.4	11.3
60.0	64637.	-57.9			226.8	13.2
50.0	68429.	-56.8			104.4	11.3
40.0	73073.	-56.3				

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

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM WSD DATE 30 Sept 83 TIME 1406

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

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____.

HEIGHTS ARE METERS AGL____ OR FEET AGL_____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	210	16	1680	215	15			
60	218	13	1740	212	16			
120	223	11	1800	222	17			
180	232	10	1860	214	23			
240	221	08	1920	216	23			
300	223	09	1980	218	25			
360	240	06	2040	213	27			
420	220	09	2100	208	20			
480	234	10	2160	207	25			
540	236	07	2220	206	20			
600	221	12	2280	223	30			
660	240	11	2340	204	24			
720	224	09	2400	211	23			
780	229	10	2460	221	29			
840	256	08	2520	219	27			
900	226	10	2580	220	29			
960	211	12	2640	211	23			
1020	197	08	2700	213	30			
1080	192	10	2760	212	28			
1140	184	10						
1200	202	17						
1260	212	12						
1320	210	11						
1380	203	11						
1440	216	10						
1500	204	12						
1560	223	18						
1620	221	18						

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

30 September 1983

JALLEN 0900 MDT
METCM1332065
301500124879

00178002	29260879
01206002	29170868
02308009	28980843
03321016	28740804
04342020	28500758
05378023	28190714
06383039	27790671
07364041	27500631
08359039	27190593
09357038	26920557
10390034	26690523
11400033	26350490
12403043	25940444
13384046	25230389
14378045	24400339
15388051	23580294
16401062	22820254
17405081	22170219
18429083	21450181
19425088	20860159
20414054	20580135
21381038	20400115
22312016	20790097
23387026	20990083
24017001	21310070
25352017	21510060
26105011	21750051

JALLEN 1100 MDT
METCM1332065
301700124879

00382002	29530879
01249004	29310869
02304005	29080844
03305013	28750805
04345021	28460759
05385028	28120714
06388033	27820672
07378035	27560632
08353031	27260594
09382034	26960558
10389036	26600523
11386041	26320491
12398039	25820445
13401041	25130389
14403039	24380339
15403054	23680294
16390066	22910254
17400073	22120219
18424085	21400187
19426089	20950159
20415054	20760135
21372041	20500115
22340026	20640097
23370022	21120083
24064005	21390071
25371015	21600060
26314006	21660052

WSD 1406 MDT
METCM1324064
302010122880

00373016	30110880
01408012	29860870
02385007	29690846
03389011	29310808
04367013	28830762
05377018	28430718
06375025	28090676
07373025	27760636
08366027	27390597
09371029	27030561
10400025	26740527
11400034	26550494
12390044	26010448
13384028	25310393
14398026	24670343
15405043	23930298
16403051	23070258
17402066	22230222
18422088	21550190
19428086	20810162
20434066	20570137
21393044	20440116
22378038	20480098
23395017	21090084
24052012	21310071
25359016	21490061
26185004	21670052