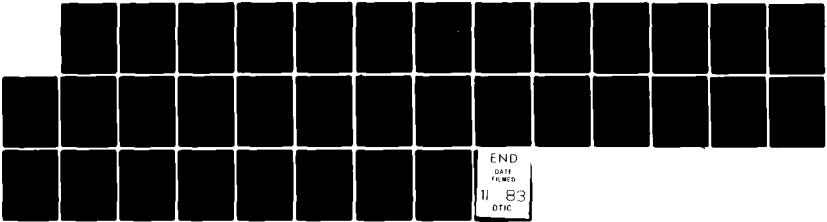
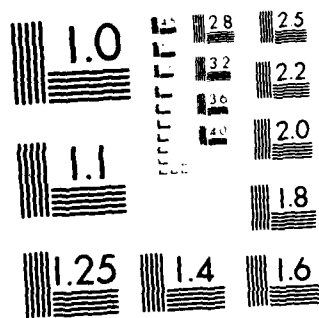


AD-A134 507 17901A HONEST JOHN MISSILE NUMBER 2817 792 ROUND NUMBER 1/1
HJ676ASL HJ677ASL (U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER SEP 83
UNCLASSIFIED ERADCOM/ASL-DR-1316 F/G 4/2 NL





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

DR 1316
Sep 83

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

AD

(Handwritten initials)

A134507

METEOROLOGICAL DATA REPORT

17901A Honest John
Missile Number 2817, 792
Round Number HJ676ASL, HJ677ASL
14 September 1983

by

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

DTIC
NOV 7 1983
(Handwritten signature)
A

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

DTIC FILE COPY

.....
ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

83 11 02 063

DISPOSITION INSTRUCTIONS

26
2000

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR-1316 ✓	2. GOVT ACCESSION NO. A134507	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 17901A Honest John Missile Number 2817, 792 Round Number HJ676ASL, HJ677ASL		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)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 17901A Honest John, Missile Number 2817, 792, Round Number HJ676ASL, HJ677ASL are presented in tabular form.		

CONTENTS

PAGE

INTRODUCTION-----	1
DISCUSSION-----	1
GENERAL AREA MAP-----	2
LAUNCH AREA DIAGRAM-----	3
TABLES:	
1. Surface Observations Taken at 1005 and 1119 MDT at LC-33-----	4
2. LC-33 Tower Mounted Anemometer Measured Wind Data Taken at 1005 MDT-----	5
3. LC-33 Tower Mounted Anemometer Measured Wind Data Taken at 1119 MDT-----	6
4. Aiming and T-Time Ballistic Met Message Data-----	7
5. WSD Significant Level Data Taken at 0700 MDT-----	8
6. WSD Upper Air Data Taken at 0700 MDT-----	10
7. WSD Mandatory Levels Taken at 0700 MDT-----	15
8. LC-37 Significant Level Data Taken at 0900 MDT-----	16
9. LC-37 Upper Air Data Taken at 0900 MDT-----	17
10. LC-37 Mandatory Levels Taken at 0900 MDT-----	20
11. WSD Significant Level Data Taken at 1000 MDT-----	21
12. WSD Upper Air Data Taken at 1000 MDT-----	22
13. WSD Mandatory Levels Taken at 1000 MDT-----	24
14. LC-37 Significant Level Data Taken at 1119 MDT-----	25
15. LC-37 Upper Air Data Taken at 1119 MDT-----	26
16. LC-37 Mandatory Levels Taken at 1119 MDT-----	29



A-1

INTRODUCTION

17901A Honest John, Missile Numbers 2817, and 792, Round Numbers HJ 676ASL and HJ677ASL, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1005 and 1118 MDT, 14 Sept 83. The scheduled launch times were 1000, and 1115 MDT.

DISCUSSION

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

1. Observations

a. Surface

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

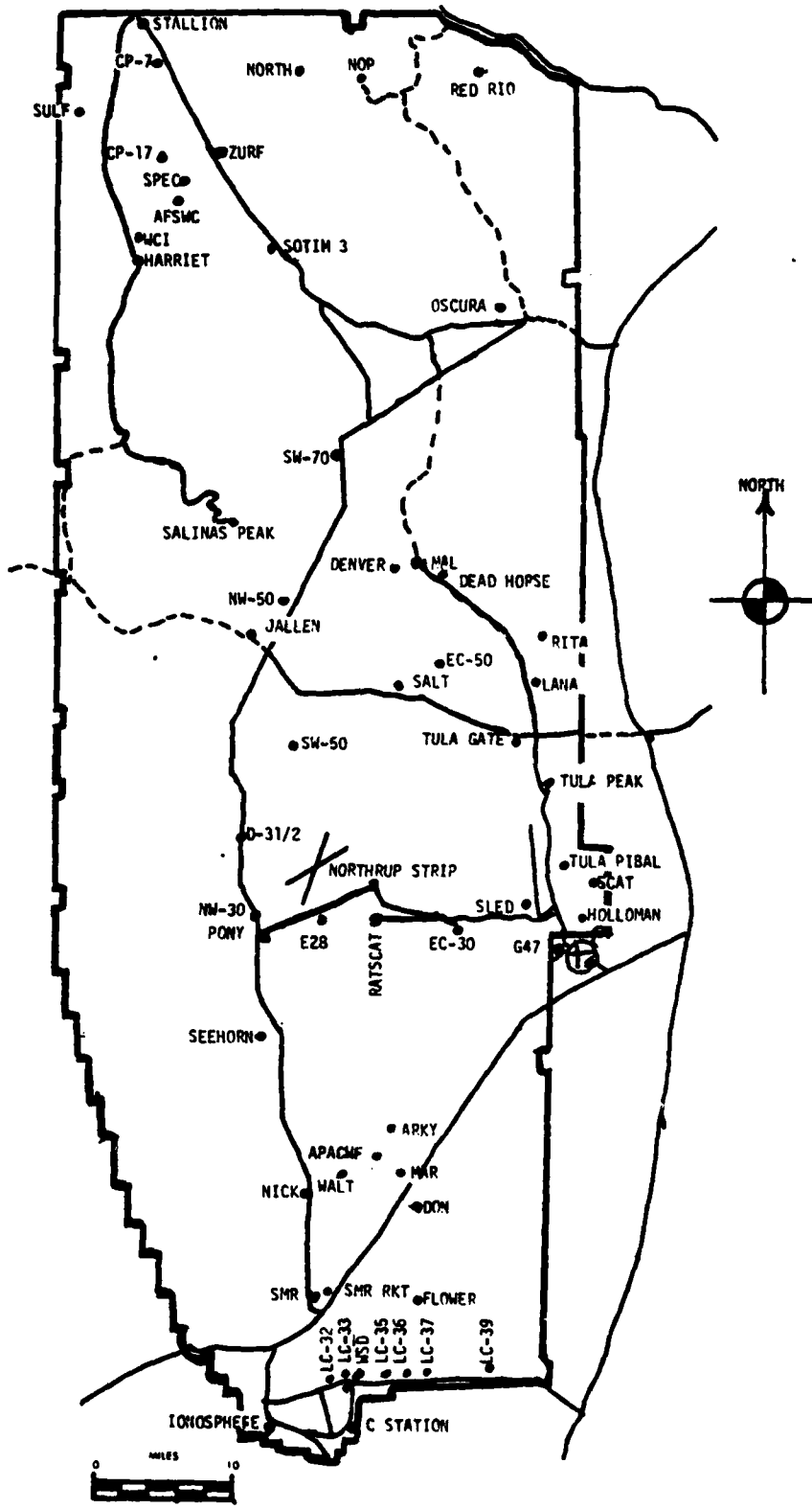
(2) Anemometer data were provided from existing towermounted anemometers at LC-33. Monitor of wind speed and direction from on anemometer was also provided in the launch control room.

b. Upper Air- Air structure data (rawinsonde) were collected at the following Met Sites.

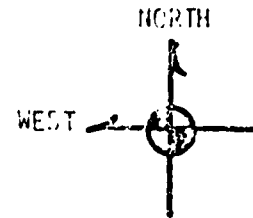
SITE AND TIME

WSD 0700 MDT
LC-37 0900 MDT
WSD 1000 MDT
LC-37 1119 MDT

WSMR METEOROLOGICAL SITES



LC-33
Launch Area



1 inch = 250 ft

Y186,500

Y186,000

MET
Tower

Y185,500

X485,000

X485,500

X486,000

Y185,000

L-500

LINE OF FIRE



LINE OF FIRE



Anemometer Pole #3



Anemometer Pole #2



Anemometer Pole #1

L-218



L-219



PROJECT SURFACE OBSERVATION

TABLE 1 STATION LC-33 E6A
 DATE 14 DAY SEP MONTH 83 YEAR
 X = 484.982.64 Y = 185.957.73 H = 3005.00

TIME M D L	PRESSURE mbs	TEMPERATURE OF OC	DEW POINT OF OC	RELATIVE HUMIDITY %	DENSITY gm/m ³	WIND		VISIBIL- ITY
						DIRECTION degs In	SPEED kts	
1005	885.5	23.8	14.7	57	1033.4	041	01	50
1119	885.1	25.6	15.0	52	1026.6	144	03	40

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	HGT	AMT	HGT	AMT	HGT	
	6	SC 6,500	3	AC 10,000			H ALQDS
	6	SC 6,500	3	AC 11,000			H ALQDS

PSYCHROMETRIC COMPUTATION

TIME: MDT	1005	1119
DRY BULB TEMP.	23.8	25.6
WET BULB TEMP.	17.7	17.7
WET BULB DEPR.	6.1	7.2
DEW POINT	14.7	15.0
RELATIVE HUMID.	57%	52

LC-33 METEOROLOGICAL TOWER
ANEMOMETER MEASURED WIND DATA

WSTM COORDINATES X=484,982.64 Y=185,957.73 H=3983.00(BASE)

TABLE NO. 2

DATE 14 Sep 1983 1005 M D T
DAY MONTH YEAR TIME

LEVEL #1 12 FT AGL			LEVEL #2 62 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30		CALM	T-30	092	03
T-20	068	02	T-20	092	03
T-10	056	02	T-10	096	03
T- 0 (1st T)	041	01	T- 0 (1st T)	108	04
T+10		CALM	T+10	111	04
T+20	END OF DATA		T+20	END OF DATA	
T+30			T+30		
T+40			T+40		
T+50			T+50		
T+60			T+60		
LEVEL #3 102 FT AGL			LEVEL #4 202 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	090	03	T-30	099	06
T-20	092	03	T-20	102	07
T-10	093	04	T-10	105	07
T- 0 (1st T)	099	05	T- 0 (1st T)	114	06
T+10	082	03	T+10	120	06
T+20	END OF DATA		T+20	END OF DATA	
T+30			T+30		
T+40			T+40		
T+50			T+50		
T+60			T+60		

LC-33 METEOROLOGICAL TOWER
ANEMOMETER MEASURED WIND DATA

WSTM COORDINATES X=484,982.64 Y=185,957.73 H=3983.00(BASE)

TABLE NO. 3

DATE 14 Sept 83 1119 M D T
DAY MONTH YEAR TIME

LEVEL #1 12 FT AGL			LEVEL #2 62 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	147	04	T-30	117	03
T-20	143	04	T-20	107	02
T-10	138	03	T-10	108	01
T- 0 (1st T)	144	03	T- 0 (1st T)	116	01
T+10	132	03	T+10	141	02
T+20	END OF DATA		T+20	END OF DATA	
T+30			T+30		
T+40			T+40		
T+50			T+50		
T+60			T+60		
LEVEL #3 102 FT AGL			LEVEL #4 202 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	105	03	T-30	096	03
T-20	096	03	T-20	072	03
T-10	090	02	T-10	113	03
T- 0 (1st T)	078	01	T- 0 (1st T)	111	04
T+10	088	01	T+10	110	03
T+20	END OF DATA		T+20	END OF DATA	
T+30			T+30		
T+40			T+40		
T+50			T+50		
T+60			T+60		

Table 4

AIMING AND T-TIME BALLISTIC MET MESSAGE DATA

14 September 1983

WSD 0700 MDT
METB31324064
141300122856
002801020856
012309025852
022215026852
032614026852
042914025853
053112026854
063307029854

LC-37 0900 MDT
METB31325064
141500124847
002404029847
012203028848
022307027849
032707026850
043109027851
053507027851
063506028852

WSD 1000 MDT
METB31324064
141600122838
002704042838
012607036844
022504030848
032406027851
042909027852
053206028853
063506028854

LC-37 1119 MDT
METB31325064
141730124833
000000047833
012304036842
022506034844
032607031846
042906029848
053406029849
063707032850

STATION ALTITUDE 379.6 FEET MSL
 14 SEP. 35
 ASCENSION No. 474

SIGNIFICANT LEVEL DATA
 570020436
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 5

PRESSURE	GEOMETRIC ALTITUDE	AIR TEMPERATURE	REL. HUM.
MILLIBARS	MSL FEET	DEGREES CENTIGRADE	PERCENT
804.8	3984.0	18.3	74.0
874.2	4330.2	19.7	73.0
850.0	5125.1	18.3	76.0
811.6	6423.8	15.2	92.0
751.6	8189.2	11.6	97.0
700.0	10500.5	8.3	87.0
675.0	11489.5	7.8	74.0
648.0	13435.5	3.8	78.0
571.8	15835.0	.3	69.0
526.4	16644.7	-1.6	34.0
520.4	17454.7	-3.4	67.0
531.0	17862.9	-4.0	46.0
514.0	18704.9	-5.6	52.0
500.0	19414.6	-7.7	55.0
489.4	19962.7	-8.3	47.0
473.4	20806.9	-10.1	54.0
467.0	21371.0	-11.6	76.0
441.8	22547.0	-13.8	86.0
419.0	23870.4	-15.6	78.0
411.4	24324.5	-16.5	70.0
400.0	25017.6	-18.4	49.0
396.6	25226.9	-19.3	16.0
374.7	26611.5	-21.3	16.0
360.7	27534.4	-22.2	15.0
319.7	30421.7	-27.8	13.0
300.0	31915.2	-31.5	13.0
282.0	35022.6	-39.1	13.0
277.0	36176.1	-41.4	13.0
243.7	38509.3	-47.5	
200.0	40940.9	-52.4	
173.7	43907.4	-58.0	
150.7	46919.8	-63.0	
142.3	47983.0	-65.5	
126.1	50386.4	-69.1	
115.6	52100.9	-69.0	
100.0	54933.7	-72.9	
85.9	57691.2	-70.5	
70.0	61952.9	-55.1	
66.2	63079.0	-64.0	
61.2	64656.9	-58.1	

STATION ALTITUDE 3229.00 FEET MSL
 14 SEP. 83
 ASCENSION NO. 436 0700 MDT

SIGNIFICANT LEVEL DATA
 4570020636
 WHITE SANDS

GEOMETRIC COORDINATES
 32.40041 LAT DEG
 106.37333 LON DEG

TABLE 5 Con't

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT PERCENT	
20.9	67717.8	-58.9		
50.0	68891.2	-57.1		
39.9	73659.7	-52.4		
50.0	79777.8	-50.9		
26.6	82377.5	-49.3		
20.0	88655.6	-42.2		
16.4	93120.0	-39.6		
17.3	97622.2	-44.1		

STATION ALTITUDE 595.00 FEET MSL
 14 SEP 57
 ASCENSION NO. 43c 0700 MDT

UPPER AIR DATA
 27002043A
 WHITE SANDS

GEODETTIC COORDINATES
 32.40743 LAT DEG
 106.37033 LON DEG

TABLE 6

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIR. DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
599.0	954.8	15.5	74.0	1050.5	667.3	160.0	1.0	1.000304
400.0	884.5	15.4	74.0	1049.9	667.4	158.0	1.1	1.000304
450.0	869.0	17.0	73.6	1026.7	649.0	139.6	5.0	1.000303
500.0	853.8	15.0	75.5	1012.3	667.8	137.5	9.0	1.000296
550.0	838.7	17.4	80.6	998.3	666.5	136.7	13.0	1.000295
600.0	823.9	16.2	86.8	984.7	665.1	140.3	15.1	1.000292
650.0	809.4	13.0	92.2	971.1	663.8	151.7	14.4	1.000289
700.0	794.9	14.0	93.6	957.4	662.6	161.7	14.0	1.000282
750.0	780.7	13.0	95.0	943.9	661.3	168.6	16.3	1.000276
800.0	766.8	12.0	96.5	930.6	660.0	173.5	16.0	1.000270
850.0	753.0	11.2	95.7	916.8	659.0	178.0	15.0	1.000264
900.0	739.4	10.4	93.5	902.8	658.1	182.9	12.8	1.000257
950.0	726.0	9.7	91.3	889.0	657.1	188.7	11.1	1.000250
1000.0	712.9	9.0	89.4	875.4	656.2	192.7	10.7	1.000244
1050.0	700.0	8.3	87.0	862.0	655.3	197.7	9.4	1.000236
1100.0	687.3	7.6	80.4	847.4	654.6	206.8	7.6	1.000230
1150.0	674.7	7.2	74.0	833.0	654.4	216.6	6.0	1.000223
1200.0	662.3	6.9	75.0	820.9	653.2	228.5	4.8	1.000219
1250.0	650.2	5.7	76.1	808.9	651.9	221.6	5.2	1.000214
1300.0	638.2	4.7	77.1	797.1	650.0	216.4	5.5	1.000210
1350.0	626.5	3.7	77.6	785.3	649.4	213.1	5.7	1.000206
1400.0	614.8	3.0	74.0	772.9	648.5	211.1	5.7	1.000201
1450.0	603.3	2.2	72.1	760.7	647.6	210.4	5.3	1.000196
1500.0	592.1	1.5	70.3	748.6	646.7	211.7	4.7	1.000192
1550.0	581.1	.9	70.3	736.8	645.8	214.7	4.0	1.000187
1600.0	570.2	.1	61.9	725.6	644.0	240.1	2.5	1.000181
1650.0	559.5	-1.3	40.3	715.7	642.9	303.7	2.7	1.000171
1700.0	548.9	-2.4	46.5	705.0	641.6	333.8	3.9	1.000170
1750.0	538.5	-3.5	54.9	694.1	640.5	348.4	4.6	1.000171
1800.0	528.2	-4.5	48.7	683.3	639.3	377	4.3	1.000164
1850.0	518.1	-5.4	51.0	673.0	638.0	7.5	4.4	1.000161
1900.0	508.1	-6.0	54.9	663.1	636.5	7.0	4.6	1.000154
1950.0	498.3	-7.0	57.1	653.3	635.1	8.7	4.0	1.000156
2000.0	488.7	-7.9	47.4	643.2	633.3	9.7	3.4	1.000151
2050.0	479.2	-9.4	50.2	633.0	633.0	14.6	3.7	1.000149
2100.0	469.6	-10.5	50.2	622.6	631.7	20.7	2.6	1.000148
2150.0	460.0	-11.0	77.1	612.1	630.2	24.2	3.3	1.000147
2200.0	451.0	-12.0	81.3	601.7	628.1	23.8	3.8	1.000145
2250.0	442.7	-13.7	95.6	591.5	626.0	21.7	4.3	1.000142
2300.0	433.9	-14.4	83.3	581.3	624.1	19.0	5.1	1.000139

UPPER AIR DATA
 2570020436
 WHITE SANDS
 TABLE 6 Con't

STATION ALTITUDE 1935.0 FEET MSL
 14 SEP. 53
 ASCENSION NO. 436
 0700 MDT

GEODETIC COORDINATES
 32.6043 LAT DEG
 106.17033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEPT POINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
21500.0	435.3	-15.1	-17.7	80.2	573.3	626.2	340.3	5.9	1.000136
22000.0	410.3	-15.9	-19.1	75.7	567.7	625.3	329.8	10.0	1.000133
22500.0	385.5	-17.0	-22.0	64.7	555.0	623.8	323.8	13.1	1.000130
23000.0	360.3	-18.4	-26.3	49.5	546.9	622.1	318.0	15.9	1.000126
23500.0	335.2	-19.7	-30.6	16.0	538.9	620.3	315.0	18.1	1.000121
24000.0	310.2	-20.4	-35.0	16.0	529.5	619.4	312.8	19.8	1.000119
24500.0	285.4	-21.1	-40.2	16.0	520.2	618.5	315.0	20.1	1.000117
25000.0	260.7	-21.7	-45.4	14.7	510.7	617.6	319.8	19.0	1.000115
25500.0	235.2	-22.2	-50.9	13.1	501.3	617.2	324.7	19.6	1.000112
26000.0	210.2	-23.1	-56.7	13.0	492.8	616.1	329.4	19.5	1.000111
26500.0	185.4	-24.1	-62.5	13.0	484.5	614.9	328.4	21.5	1.000109
27000.0	160.3	-25.0	-68.3	13.0	476.3	613.7	327.2	23.6	1.000107
27500.0	135.3	-26.0	-74.1	13.0	468.3	612.5	325.3	25.9	1.000105
28000.0	110.4	-27.0	-80.0	13.0	460.4	611.3	326.6	26.5	1.000103
28500.0	85.4	-28.0	-85.8	13.0	452.7	610.1	327.6	27.0	1.000101
29000.0	60.4	-29.0	-91.6	13.0	445.5	608.5	327.6	26.5	1.000100
29500.0	35.4	-30.5	-97.4	13.0	438.3	606.9	327.9	26.1	1.000098
30000.0	10.4	-31.7	-103.2	13.0	431.2	605.4	326.0	26.0	1.000096
30500.0	10.4	-32.9	-109.0	13.0	424.1	603.8	323.0	26.4	1.000095
31000.0	10.4	-34.1	-114.8	13.0	417.1	602.3	322.3	27.0	1.000093
31500.0	10.4	-35.3	-120.6	13.0	410.2	600.7	321.7	28.0	1.000092
32000.0	10.4	-36.6	-126.4	13.0	403.4	599.2	321.2	29.1	1.000090
32500.0	10.4	-37.8	-132.2	13.0	396.8	597.6	319.0	30.2	1.000089
33000.0	10.4	-39.0	-138.0	13.0	390.2	596.1	317.4	31.0	1.000087
33500.0	10.4	-40.1	-143.8	7.1**	383.5	594.7	316.8	30.6	1.000086
34000.0	10.4	-41.2	-149.6	.9**	376.9	593.3	317.0	30.8	1.000084
34500.0	10.4	-42.3	-155.4		370.3	591.7	317.4	31.0	1.000082
35000.0	10.4	-43.4	-161.2		364.7	590.1	317.9	31.5	1.000081
35500.0	10.4	-44.5	-167.0		357.8	588.5	314.0	31.5	1.000080
36000.0	10.4	-45.6	-172.8		351.7	586.9	314.4	31.0	1.000078
36500.0	10.4	-46.7	-178.6		345.5	585.2	314.0	30.6	1.000077
37000.0	10.4	-47.8	-184.4		339.4	583.6	313.4	30.5	1.000076
37500.0	10.4	-48.9	-190.2		333.1	582.0	311.5	31.2	1.000074
38000.0	10.4	-50.0	-196.0		326.9	581.3	309.7	31.6	1.000073
38500.0	10.4	-51.1	-201.8		320.9	580.0	306.9	31.6	1.000071
39000.0	10.4	-52.2	-207.6		314.0	578.0	305.2	31.6	1.000070
39500.0	10.4	-53.3	-213.4		308.0	577.0	303.8	31.7	1.000069
40000.0	10.4	-54.4	-219.2		302.0	575.2	305.1	34.7	1.000067
40500.0	10.4	-55.5	-225.0		297.0	575.0	306.7	36.9	1.000066
41000.0	10.4	-56.6	-230.8		291.3	573.7	308.0	33.7	1.000065

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

UPPER AIR DATA
 570020436
 WHITE SANDS
 TABLE 6 Con't

STATION ALTITUDE 3925.0 FEET MSL
 14 SEP. 8,
 0700 MDT
 ASCENSION NO. 436

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GLOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
4500.0	177.1	-57.6	265.7	572.5	310.9		1.000064	
4000.0	174.9	-56.4	260.2	571.2	312.8		1.000042	
4500.0	168.0	-59.0	274.5	570.1	317.3		1.000041	
4500.0	164.7	-59.6	268.9	569.0	310.5		1.000060	
4500.0	160.7	-60.5	263.5	567.9	306.5		1.000059	
4000.0	156.9	-61.3	258.2	566.8	302.2		1.000058	
4650.0	153.1	-62.3	252.9	565.7	297.7		1.000056	
4700.0	149.4	-63.2	247.9	564.5	299.0		1.000055	
4750.0	145.7	-64.4	243.2	562.9	297.6		1.000054	
4000.0	142.2	-65.5	238.6	561.4	296.1		1.000053	
4500.0	136.6	-66.3	233.5	560.3	294.6		1.000052	
4700.0	135.2	-67.0	228.5	559.3	293.7		1.000051	
4500.0	131.6	-67.6	223.6	558.3	299.7		1.000050	
5000.0	126.6	-68.0	218.9	557.3	305.6		1.000049	
5500.0	123.4	-69.1	214.0	556.5	312.7		1.000048	
5000.0	122.2	-69.1	208.7	555.5	317.7		1.000045	
5150.0	119.2	-69.0	203.4	556.6	323.0		1.000045	
5000.0	116.2	-69.0	198.3	556.6	328.3		1.000044	
5500.0	113.3	-69.5	193.8	555.9	335.5		1.000043	
5000.0	110.4	-70.2	189.5	554.9	338.6		1.000042	
5500.0	107.6	-70.9	185.4	554.0	341.8		1.000041	
5000.0	104.9	-71.6	181.3	553.1	349.9		1.000040	
5500.0	102.2	-72.3	177.3	552.1	340.6		1.000039	
5000.0	99.7	-72.9	173.3	551.4	345.1		1.000039	
5500.0	97.1	-73.5	168.6	551.8	357.7		1.000038	
5000.0	94.7	-74.1	164.1	552.3	3.5		1.000037	
5000.0	92.0	-74.0	159.5	552.8	9.0		1.000036	
5000.0	89.9	-74.4	155.3	553.3	14.4		1.000035	
5500.0	87.6	-74.1	151.1	553.8	21.4		1.000034	
5000.0	85.4	-73.6	147.0	554.4	28.7		1.000033	
5500.0	83.3	-73.9	142.8	555.3	35.9		1.000032	
5000.0	81.2	-74.2	138.8	556.3	48.1		1.000031	
5500.0	79.2	-74.0	134.9	557.3	62.0		1.000030	
6000.0	77.2	-73.8	131.1	558.2	78.4		1.000029	
6500.0	75.3	-73.1	127.4	559.2	95.8		1.000028	
5000.0	73.4	-72.9	123.8	560.1	93.0		1.000028	
5500.0	71.9	-72.7	120.3	561.1	97.3		1.000027	
6000.0	69.3	-72.1	116.9	562.0	85.5		1.000026	
6500.0	66.1	-71.6	113.8	562.6	70.0		1.000025	
6000.0	60.5	-71.1	110.7	563.3	33.7		1.000025	

UPPER AIR DATA
 27020436
 WHITE SANDS

STATION ALTITUDE 2909.0 FEET MSL
 14 SEP. 53
 0700 MDT
 ASCENSION NO. 430

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37733 LON DEG

TABLE 6 Con't

GEOMETRIC ALTITUDE FSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
6500.0	64.9	-62.4	107.2	565.5	33.2		3.1	1.000024
6400.0	62.3	-60.0	103.7	568.0	49.1		3.1	1.000023
6300.0	61.8	-58.7	100.3	570.5	48.7		2.0	1.000022
6200.0	60.3	-56.4	97.7	571.2	38.5		.8	1.000022
6100.0	58.9	-54.3	95.4	571.0	85.5		1.0	1.000021
6000.0	57.5	-52.5	92.2	570.8	107.8		1.6	1.000021
5900.0	56.1	-50.0	91.1	570.7	48.0		2.3	1.000020
5800.0	54.8	-48.7	89.0	570.5	29.8		4.1	1.000020
5700.0	53.5	-48.0	86.9	570.3	39.6		6.4	1.000019
5600.0	52.2	-46.5	84.7	570.7	47.7		8.6	1.000019
5500.0	50.9	-45.3	82.4	571.7	69.1		10.5	1.000018
5400.0	49.7	-44.2	80.2	572.5	82.0		12.8	1.000018
5300.0	48.6	-43.0	78.2	573.2	90.2		13.2	1.000017
5200.0	47.4	-42.2	76.2	573.9	97.7		13.4	1.000017
5100.0	46.3	-41.0	74.2	574.6	105.0		12.9	1.000017
5000.0	45.3	-40.0	72.3	575.2	110.6		12.4	1.000016
4900.0	44.2	-39.0	70.4	575.9	112.6		11.3	1.000016
4800.0	43.2	-38.1	68.6	576.6	112.5		10.4	1.000015
4700.0	42.2	-37.0	66.9	577.3	108.4		9.8	1.000015
4600.0	41.2	-36.1	65.2	577.9	106.0		8.9	1.000015
4500.0	40.2	-35.0	63.5	578.6	106.7		7.7	1.000014
4400.0	39.3	-34.0	62.0	578.9	109.0		6.5	1.000014
4300.0	38.4	-33.0	60.5	579.1	119.1		5.6	1.000013
4200.0	37.5	-32.1	59.1	579.3	129.0		5.0	1.000013
4100.0	36.6	-31.9	57.7	579.4	116.0		5.5	1.000012
4000.0	35.8	-31.0	56.3	579.6	105.7		6.2	1.000013
3900.0	35.0	-31.7	55.0	579.7	98.2		10.0	1.000012
3800.0	34.1	-31.6	53.7	579.9	94.8		13.9	1.000012
3700.0	33.4	-31.5	52.4	580.1	91.2		15.3	1.000012
3600.0	32.6	-31.3	51.2	580.2	67.5		16.0	1.000011
3500.0	31.9	-31.2	50.0	580.4	82.9		14.8	1.000011
3400.0	31.1	-31.1	48.8	580.5	75.7		12.7	1.000011
3300.0	30.4	-31.0	47.7	580.7	68.5		10.2	1.000011
3200.0	29.7	-30.9	46.5	581.0	63.2		8.7	1.000010
3100.0	29.0	-30.8	45.4	581.4	57.1		7.6	1.000010
3000.0	28.4	-30.7	44.3	581.8	53.6		7.2	1.000010
2900.0	27.7	-30.6	43.2	582.2	49.7		6.9	1.000010
2800.0	27.1	-30.5	42.2	582.6	46.4		9.0	1.000009
2700.0	26.5	-30.4	41.1	583.0	43.4		11.3	1.000009
2600.0	25.9	-30.3	40.1	583.7	40.4		13.6	1.000009

UPPER AIR DATA
 2570020436
 WHITE SANDS

STATION ALTITUDE 3925.0 FEET MSL
 14 SEP. 83 0700 MDT
 ASCENSION NO. 436

GEODETIC COORDINATES
 32.60943 LAT DEG
 104.37033 LON DEG

TABLE 6 Con't

ALTIMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
81500.0	25.3	-43.1		39.1	584.4	49.7	15.8	1.000009
84000.0	24.7	-47.6		38.2	585.1	49.9	18.0	1.000006
84500.0	24.2	-47.1		37.7	585.7	51.2	19.2	1.000006
85000.0	23.6	-46.6		36.3	586.4	52.4	20.3	1.000008
85500.0	23.1	-46.1		35.4	587.1	53.8	21.1	1.000006
86000.0	22.6	-45.5		34.5	587.7	55.3	21.6	1.000008
86500.0	22.1	-45.0		33.7	588.4	57.5	22.1	1.000007
87000.0	21.6	-44.5		32.9	589.1	68.5	22.3	1.000007
87500.0	21.1	-44.0		32.0	589.7	78.9	23.3	1.000007
88000.0	20.6	-43.5		31.3	590.4	86.6	23.7	1.000007
88500.0	20.1	-43.0		30.5	591.1	93.2	23.5	1.000007
89000.0	19.7	-42.6		29.8	591.6	99.2	23.3	1.000007
89500.0	19.3	-42.2		29.1	592.1	100.4	21.3	1.000006
90000.0	18.8	-41.6		28.4	592.5	101.9	19.3	1.000006
90500.0	18.4	-41.3		27.7	593.0	101.3	18.1	1.000006
91000.0	18.0	-41.1		27.1	593.4	99.1	17.4	1.000006
91500.0	17.6	-40.4		26.4	593.9	96.4	16.7	1.000006
92000.0	17.2	-40.4		25.8	594.3	87.8	17.0	1.000006
92500.0	16.9	-40.0		25.2	594.8	79.7	17.6	1.000006
93000.0	16.5	-39.7		24.6	595.3	75.3	17.9	1.000005
93500.0	16.1	-40.0		24.1	594.9	73.7	17.8	1.000005
94000.0	15.6	-40.4		23.6	594.3	72.2	17.6	1.000005
94500.0	15.4	-40.9		23.1	593.7	76.4	16.6	1.000005
95000.0	15.1	-41.4		22.7	593.1	81.2	15.7	1.000005
95500.0	14.7	-41.9		22.2	592.5			1.000005
96000.0	14.4	-42.4		21.8	591.8			1.000005
96500.0	14.1	-42.6		21.3	591.2			1.000005
97000.0	13.8	-43.3		20.9	590.6			1.000005
97500.0	13.5	-43.6		20.5	590.0			1.000005

UPPER AIR DATA
 2570020436
 WHITE SANDS

STATION ALTITUDE 3929.0 FEET MSL
 14 SEP. 83 0700 MDT
 ASCENSION NO. 436

GEODETIC COORDINATES
 32.40943 LAT DEG
 106.37933 LONG DEG

TABLE 6 Con't

GLOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
80500.0	25.3	-43.1		39.1	584.4	49.7	15.8	1.000009
84000.0	24.7	-47.6		38.2	585.1	49.9	18.0	1.000006
85000.0	24.2	-47.1		37.7	585.7	51.2	19.2	1.000008
86000.0	23.6	-46.6		36.3	586.4	52.4	20.3	1.000008
87000.0	23.1	-45.1		35.4	587.1	53.8	21.1	1.000008
88000.0	22.6	-45.5		34.5	587.7	55.3	21.6	1.000008
89000.0	22.1	-45.0		33.7	588.4	57.5	22.1	1.000007
87000.0	21.6	-44.5		32.9	589.1	68.5	22.3	1.000007
87500.0	21.1	-44.0		32.0	589.7	72.0	23.3	1.000007
86000.0	20.6	-43.5		31.3	590.4	86.6	23.7	1.000007
85500.0	20.1	-43.0		30.5	591.1	93.2	23.5	1.000007
85000.0	19.7	-42.6		29.8	591.6	99.2	23.3	1.000007
84500.0	19.3	-42.2		29.1	592.1	100.4	21.3	1.000006
84000.0	18.8	-41.8		28.4	592.5	101.9	19.3	1.000006
83500.0	18.4	-41.5		27.7	593.0	101.3	18.1	1.000006
83000.0	18.0	-41.1		27.1	593.4	99.1	17.4	1.000006
81500.0	17.6	-40.6		26.4	593.9	96.4	16.7	1.000006
81000.0	17.2	-40.4		25.8	594.3	87.8	17.0	1.000006
80500.0	16.9	-40.0		25.2	594.8	79.7	17.6	1.000006
80000.0	16.5	-39.7		24.6	595.3	75.3	17.9	1.000005
83500.0	16.1	-40.0		24.1	594.9	73.7	17.8	1.000005
84000.0	15.8	-40.4		23.6	594.3	72.2	17.6	1.000005
84500.0	15.4	-40.9		23.1	593.7	76.4	16.6	1.000005
85000.0	15.1	-41.4		22.7	593.1	81.2	15.7	1.000005
85500.0	14.7	-41.9		22.2	592.5			1.000005
86000.0	14.4	-42.4		21.8	591.8			1.000005
86500.0	14.1	-42.8		21.3	591.2			1.000005
87000.0	13.8	-42.3		20.9	590.6			1.000005
87500.0	13.5	-43.8		20.5	590.0			1.000005

STATION ALTITUDE 3956 FT FEET MSL
 14 SEP. 53
 ASCENSION NO. 436

MANDATORY LEVELS
 270020436
 WHITE SANDS

GEODETIC COORDINATES
 32.60043 LAT DEG
 106.37033 LON DEG

TABLE 7

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES(TN)	SPEED KNOTS
550.0	5121.	18.3	76.	137.2	10.0
600.0	6820.	14.4	93.	158.4	14.4
750.0	8604.	11.0	95.	179.0	14.6
800.0	10490.	8.3	87.	197.6	9.4
850.0	12497.	5.7	76.	221.5	5.2
900.0	14634.	2.0	73.	210.1	5.2
950.0	16925.	-2.3	46.	330.9	3.7
1000.0	19387.	-7.7	59.	R.2	4.1
1050.0	22054.	-12.9	82.	27.5	3.9
1100.0	24975.	-18.4	49.	318.8	15.9
1150.0	28209.	-23.6	13.	328.9	20.5
1200.0	31851.	-31.5		325.5	26.0
1250.0	35996.	-41.4		317.1	10.8
1300.0	40840.	-52.4		305.4	32.3
1350.0	43639.	-57.7		311.8	32.3
1400.0	46791.	-63.0		297.9	26.9
1450.0	50412.	-69.1		312.6	10.5
1500.0	54762.	-72.9		344.2	10.6
1550.0	59063.	-68.8		55.6	7.0
1600.0	61739.	-65.1		86.9	8.1
1650.0	64869.	-58.2		41.6	.8
1700.0	68330.	-57.3		79.4	12.6
1750.0	73311.	-52.5		106.4	7.5
1800.0	79434.	-50.9		67.2	9.5
1850.0	83351.	-47.9		64.8	16.6
1900.0	88236.	-42.8		94.7	23.5
1950.0	94654.	-41.5		87.1	15.6

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

STATION ALTITUDE 4531.77 FEET MSL
 14 SEP. 63
 ASCENSION NO. 115 0900 MDT

SIGNIFICANT LEVEL DATA
 276190115
 LC-37

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
307.9	4551.4	21.2	14.0	66.0
877.1	4230.9	20.1	13.6	66.0
866.9	4571.2	20.2	14.3	69.0
250.0	5126.9	18.3	13.8	75.0
348.3	5657.0	16.6	13.5	84.0
013.9	6344.1	16.2	14.0	87.0
799.5	6846.2	14.5	13.4	93.0
757.7	8260.0	11.9	11.0	94.0
722.5	8570.4	12.6	10.3	86.0
700.0	10513.8	8.2	7.5	97.0
671.0	11062.7	6.6	0.1	97.0
553.6	12371.7	4.5	4.1	97.0
645.0	12726.1	3.8	0.8	81.0
593.8	14925.6	.5	-3.9	74.0

UPPER AIR DATA
 45701R0115
 LL-37
 TABLE 9

STATION ALTITUDE 4021.77 FEET MSL
 14 SEP 63 0900 MDT
 ASCENSION NO. 111

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGRS (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
451.4	882.9	11.4	66.0	1037.5	670.6	135.0	4.1	1.000304
4100.0	881.4	10.7	66.0	1032.8	670.4	135.3	4.2	1.000303
4200.0	878.3	10.5	66.0	1035.5	669.7	136.0	4.4	1.000300
4300.0	875.2	10.1	66.6	1032.6	669.4	136.5	4.6	1.000297
4400.0	872.1	10.1	67.5	1028.7	669.5	137.1	4.8	1.000300
4500.0	869.1	10.2	68.4	1024.9	669.0	137.6	5.0	1.000300
4600.0	866.0	10.1	69.3	1021.4	669.5	138.0	5.2	1.000300
4700.0	863.0	10.3	70.4	1019.0	669.1	138.4	5.4	1.000299
4800.0	859.9	10.4	71.5	1016.7	668.7	138.8	5.6	1.000298
4900.0	856.9	10.1	72.5	1014.3	668.3	139.2	5.8	1.000297
5000.0	853.9	10.7	73.6	1011.9	667.9	139.5	6.0	1.000296
5100.0	850.9	10.4	74.7	1009.5	667.5	139.8	6.2	1.000296
5200.0	847.9	10.1	75.7	1006.9	667.2	140.1	6.4	1.000295
5300.0	844.8	10.7	76.6	1004.1	667.0	140.4	6.6	1.000294
5400.0	841.9	10.7	77.6	1001.3	666.7	140.7	6.8	1.000294
5500.0	838.9	10.4	78.6	998.6	666.5	140.9	7.0	1.000293
5600.0	835.7	10.2	79.5	995.8	666.2	141.1	7.2	1.000292
5700.0	832.7	10.0	80.5	993.1	665.9	141.3	7.4	1.000292
5800.0	829.6	10.7	81.5	990.4	665.7	141.6	7.6	1.000291
5900.0	827.0	10.6	82.4	987.6	665.5	142.1	7.8	1.000291
6000.0	824.1	10.5	83.5	984.1	665.4	142.4	7.7	1.000290
6100.0	821.2	10.4	84.5	980.8	665.3	142.7	7.7	1.000290
6200.0	818.2	10.5	85.5	977.5	665.3	142.9	7.6	1.000290
6300.0	815.3	10.4	86.5	974.2	665.2	142.9	7.6	1.000289
6400.0	812.4	10.0	87.6	971.4	665.0	142.9	7.6	1.000289
6500.0	809.5	10.7	88.8	969.1	664.6	142.9	7.6	1.000289
6600.0	806.6	10.2	90.0	966.3	664.2	142.9	7.6	1.000287
6700.0	803.7	10.0	91.2	964.6	663.9	142.9	7.7	1.000286
6800.0	800.7	10.7	92.4	962.3	663.3	142.9	7.7	1.000285
6900.0	798.0	10.4	93.0	959.7	663.0	142.9	8.0	1.000284
7000.0	795.1	10.2	93.1	956.9	662.8	142.9	8.3	1.000283
7100.0	792.3	10.1	93.2	954.1	662.6	142.9	8.6	1.000281
7200.0	789.4	10.7	93.2	951.3	662.4	142.9	8.8	1.000280
7300.0	786.6	10.7	93.3	948.5	662.2	142.9	9.2	1.000279
7400.0	783.7	10.0	93.4	945.7	662.0	142.9	9.5	1.000278
7500.0	780.9	10.4	93.4	942.9	661.8	142.9	9.8	1.000276
7600.0	778.1	10.4	93.5	940.1	661.5	142.9	10.1	1.000275
7700.0	775.3	10.0	93.6	937.3	661.3	142.9	10.4	1.000274
7800.0	772.5	10.7	93.6	934.5	661.1	142.9	10.5	1.000273
7900.0	769.6	10.7	93.7	931.7	660.9	142.9	10.5	1.000272

UPPER AIR DATA
 25/01R0115
 LC-37
 TABLE 9 Con't

STATION ALTITUDE 4051.7 FEET MSL
 14 SEP 68
 ASCENSION NO. 115 0900 MDT

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.11252 LON DEG

ALTIMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		RELHUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	WIND POINT CENTIGRADE				DIRECTION DEGREES(TV)	SPEED KNOTS	
5000.0	767.0	12.5	11.5	93.0	929.0	660.7	165.5	17.5	1.000270
4900.0	764.2	12.5	11.4	93.8	924.3	660.5	167.7	10.5	1.000269
4800.0	761.5	12.5	11.2	93.9	923.6	660.2	189.1	10.6	1.000268
4700.0	758.7	12.5	11.1	94.0	920.3	660.0	170.0	10.6	1.000267
4600.0	756.0	12.5	10.5	92.1	917.4	660.1	192.6	10.7	1.000265
4500.0	753.3	12.5	10.4	87.4	912.9	660.5	194.3	10.7	1.000262
4400.0	750.5	12.4	10.2	86.4	909.7	660.4	196.0	10.8	1.000261
4300.0	747.0	12.4	10.1	87.0	907.2	660.2	197.8	10.5	1.000260
4200.0	745.1	12.4	10.0	87.5	904.6	659.9	199.6	10.3	1.000259
4100.0	742.4	11.5	9.7	88.1	903.0	659.6	231.5	10.1	1.000258
4000.0	739.7	11.6	9.7	82.6	899.5	659.4	233.5	9.9	1.000257
3900.0	737.0	11.5	9.0	85.2	896.9	659.1	205.4	9.7	1.000256
3800.0	734.3	11.1	9.5	89.7	894.4	658.9	207.7	9.5	1.000255
3700.0	731.0	10.7	9.4	90.3	891.0	658.6	210.0	9.3	1.000254
3600.0	729.0	10.7	9.2	90.8	889.4	658.3	212.3	9.2	1.000253
3500.0	726.3	10.4	9.1	91.4	886.8	658.0	213.5	9.0	1.000252
3400.0	723.7	10.2	9.6	91.9	884.3	657.8	214.0	8.8	1.000251
3300.0	721.1	10.0	8.0	92.5	881.8	657.5	214.5	8.5	1.000250
3200.0	718.4	9.8	8.7	93.0	879.3	657.2	215.1	8.3	1.000249
3100.0	715.8	9.0	8.6	93.6	876.9	657.0	215.6	8.1	1.000248
3000.0	713.2	9.3	8.4	94.2	874.4	656.7	216.2	7.9	1.000247
2900.0	710.6	9.1	8.3	94.7	871.9	656.4	216.8	7.6	1.000246
2800.0	708.0	8.9	8.2	95.3	869.5	656.2	217.5	7.4	1.000245
2700.0	705.5	8.7	8.0	95.8	867.7	655.9	218.2	7.2	1.000245
2600.0	702.9	8.5	7.9	96.4	864.6	655.6	217.4	7.1	1.000244
2500.0	700.4	8.2	7.6	96.9	862.1	655.4	216.3	7.1	1.000243
2400.0	697.8	8.1	7.6	97.0	859.4	655.2	215.2	7.0	1.000242
2300.0	695.2	7.7	7.5	97.0	856.7	655.0	214.0	7.0	1.000241
2200.0	692.7	7.5	7.4	97.0	854.0	654.8	212.8	6.9	1.000240
2100.0	690.1	7.7	7.2	97.0	851.4	654.7	211.6	6.9	1.000239
2000.0	687.6	7.5	7.1	97.0	848.7	654.5	210.4	6.9	1.000238
1900.0	685.0	7.4	6.9	97.0	846.0	654.3	209.2	6.8	1.000237
1800.0	682.5	7.4	6.9	97.0	843.3	654.1	208.2	6.8	1.000236
1700.0	680.0	7.1	6.7	97.0	840.7	654.0	208.5	6.8	1.000235
1600.0	677.5	7.0	6.5	97.0	838.0	653.8	206.8	6.8	1.000234
1500.0	675.0	6.7	6.4	97.0	835.4	653.6	209.2	6.8	1.000233
1400.0	672.5	6.7	6.2	97.0	832.8	653.5	209.5	6.8	1.000232
1300.0	670.0	6.5	6.0	97.0	830.3	653.2	209.0	6.8	1.000231
1200.0	667.5	6.3	5.9	97.0	827.7	652.8	210.2	6.8	1.000229
1100.0	665.0	6.1	5.5	97.0	825.1	652.5	210.5	6.9	1.000228

UPPER AIR DATA
 25701FC115
 LC-37

STATION ALTITUDE 4051.7 FEET MSL
 16 JPM. PJ
 ASCENSION No. 115 0900 MDT

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31252 LON DEG

TABLE 9 Con't

GEOMETRIC ALTITUDE PSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
1700.0	660.7	5.0	97.0	824.0	652.1	210.0	6.0	1.000227
1800.0	660.2	5.0	97.0	821.9	651.7	211.2	6.0	1.000225
1900.0	657.8	5.0	97.0	819.8	651.3	211.2	6.0	1.000224
2000.0	655.3	4.7	97.0	817.7	651.0	211.5	6.3	1.000223
2100.0	652.9	4.4	95.7	815.5	650.6	211.5	6.7	1.000221
2200.0	650.5	4.2	93.2	813.3	650.3	211.5	6.5	1.000216
2300.0	648.0	4.0	86.7	811.1	650.0	211.5	6.4	1.000216
2400.0	645.6	3.9	82.2	808.8	649.6	211.6	6.3	1.000213
2500.0	643.2	3.7	80.7	806.3	649.4	211.6	6.2	1.000211
2600.0	640.8	3.5	80.3	803.8	649.2	211.6	6.1	1.000210
2700.0	638.4	3.4	79.9	801.2	649.0	211.6	6.0	1.000209
2800.0	636.0	3.2	79.5	799.7	648.9	211.6	5.9	1.000208
2900.0	633.6	3.1	79.1	796.2	648.7	211.6	5.9	1.000207
3000.0	631.2	2.9	78.7	793.6	648.5	210.8	5.9	1.000206
3100.0	628.9	2.8	78.2	791.1	648.3	209.6	6.0	1.000205
3200.0	626.5	2.6	77.8	788.6	648.1	208.7	6.0	1.000204
3300.0	624.1	2.5	77.4	786.1	647.9	207.9	6.1	1.000203
3400.0	621.8	2.3	77.0	783.6	647.7	207.0	6.1	1.000202
3500.0	619.5	2.2	76.6	781.1	647.5	206.2	6.2	1.000201
3600.0	617.1	2.0	76.2	778.7	647.3	205.4	6.2	1.000200
3700.0	614.8	1.9	75.8	776.2	647.1	204.6	6.3	1.000200
3800.0	612.5	1.7	75.4	773.7	647.0			1.000199
3900.0	610.2	1.6	75.0	771.3	646.8			1.000198
4000.0	607.9	1.4	74.6	768.8	646.6			1.000197
4100.0	605.7	1.3	74.2	766.4	646.4			1.000196
4200.0	603.4	1.1	73.7	764.0	646.2			1.000195
4300.0	601.1	1.0	73.3	761.6	646.0			1.000194
4400.0	598.9	0.8	72.9	759.1	645.8			1.000193
4500.0	596.6	0.7	72.5	756.7	645.6			1.000192
4600.0	594.4	0.5	72.1	754.3	645.4			1.000191

STATION ALTITUDE 4051.77 FEET MSL
 14 SEP 85
 ASCENSION NO. 115

MANDATORY LEVELS
 2570180115
 LC-37

GEODETIC COORDINATES
 32.60175 LAT DEG
 106.31232 LON DEG

TABLE 10

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TW)	SPEED KNOTS
500.0	5125.	18.3	13.8	75.	139.9	6.2
600.0	6225.	14.6	13.4	93.	165.8	7.8
750.0	8613.	12.4	10.2	87.	196.7	10.7
1000.0	10507.	8.2	7.8	97.	216.2	7.1
1500.0	12506.	4.2	2.9	90.	211.5	6.5
2000.0	14637.	.9	-3.3	73.		

STATION ALTITUDE 3919.70 FEET FSI
 14 SEP 63
 ASCENSION 400 437
 1000 MDT

SIGNIFICANT LEVEL DATA
 257070437
 WHITE SANDS

GEODETTIC COORDINATES
 32.40043 LAT DEG
 106.37933 LON DEG

TABLE II

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
7.5.3 7989.0	25.0 14.5	52.0
5.8.9 4572.2	20.8 14.0	65.0
4.0.0 5149.2	18.7 13.8	73.0
2.9.1 6880.6	13.9 12.3	90.0
2.3.9 9460.5	10.7 9.5	92.0
2.0.0 10539.9	8.4 6.4	87.0
6.4.0 12779.9	3.3 2.7	96.0
6.9.5 13967.0	2.9 -1.0	76.0
5.0.5 13346.6	2.6 -1.7	73.0
6.5.9 13537.9	3.3 -1.1	71.0
6.1.4 17732.7	3.5 -.8	73.0
6.0.4 14667.8	1.2 -2.5	76.0
5.6.6 15262.4	-.2 -4.6	72.0

UPPER AIR DATA
 472002437
 WHITE SANDS
 TABLE 12

STATION ALTITUDE 207.0 FEET MSL
 14 SEP. 81
 1000 MDT
 ASCENSION NO. 437

GEODETIC COORDINATES
 31.40043 LAT DEG
 106.77033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
11600.0	672.8	0.0	91.3	835.7	652.4	208.2	6.8	1.000228
11400.0	677.6	6.4	90.5	840.4	653.0	206.6	7.1	1.000230
11200.0	682.0	6.9	88.4	845.3	653.5	205.1	7.3	1.000233
11000.0	687.9	7.3	86.4	850.1	654.1	204.4	7.3	1.000233
10800.0	693.0	7.6	84.4	855.0	654.6	203.7	7.3	1.000235
10600.0	698.2	8.2	82.6	859.9	655.2	203.1	7.3	1.000237
10400.0	703.3	8.7	81.2	864.8	655.8	202.4	7.4	1.000240
10200.0	708.5	9.1	80.5	869.6	656.3	201.7	7.3	1.000243
10000.0	713.7	9.5	79.9	874.5	656.9	201.0	7.1	1.000245
9800.0	718.9	10.0	79.4	879.4	657.4	200.2	6.9	1.000248
9600.0	724.2	10.4	78.5	884.4	658.0	199.4	6.8	1.000251
9400.0	729.5	10.8	77.9	889.5	658.5	198.6	6.6	1.000254
9200.0	734.8	11.0	77.6	894.6	659.1	197.8	6.9	1.000255
9000.0	740.1	11.3	77.1	899.7	659.7	197.0	7.3	1.000258
8800.0	745.5	11.5	76.6	904.8	660.3	196.2	7.8	1.000260
8600.0	750.9	11.8	76.3	909.9	660.9	195.4	8.3	1.000262
8400.0	756.4	12.0	76.0	915.0	661.5	194.6	8.8	1.000264
8200.0	761.9	12.3	75.7	920.1	662.1	193.8	9.0	1.000266
8000.0	767.4	12.5	75.4	925.2	662.7	193.0	9.3	1.000268
7800.0	773.0	12.8	75.1	930.3	663.3	192.2	9.6	1.000271
7600.0	778.6	13.0	74.8	935.4	663.9	191.4	10.0	1.000273
7400.0	784.2	13.3	74.5	940.5	664.5	190.6	9.8	1.000275
7200.0	789.9	13.5	74.2	945.6	665.1	189.8	9.0	1.000277
7000.0	795.7	13.8	73.9	950.7	665.7	189.0	8.2	1.000279
6800.0	801.4	14.1	73.6	955.8	666.3	188.2	7.5	1.000281
6600.0	807.1	14.4	73.3	960.9	666.9	187.4	6.8	1.000283
6400.0	812.9	14.7	73.0	966.0	667.5	186.6	6.2	1.000285
6200.0	818.7	15.0	72.7	971.1	668.1	185.8	5.8	1.000288
6000.0	824.6	15.3	72.4	976.2	668.7	185.0	5.9	1.000290
5800.0	830.5	15.6	72.1	981.3	669.3	184.2	6.2	1.000293
5600.0	836.4	15.9	71.8	986.4	669.9	183.4	5.4	1.000291
5400.0	842.3	16.2	71.5	991.5	670.5	182.6	5.0	1.000294
5200.0	848.2	16.5	71.2	996.6	671.1	181.8	5.6	1.000297
5000.0	854.1	16.8	70.9	1001.7	671.7	181.0	5.1	1.000299
4800.0	860.0	17.1	70.6	1006.8	672.3	180.2	5.7	1.000303
4600.0	865.9	17.4	70.3	1011.9	672.9	179.4	5.4	1.000306
4400.0	871.8	17.7	70.0	1017.0	673.5	178.6	5.0	1.000309
4200.0	877.7	18.0	69.7	1022.1	674.1	177.8	5.8	1.000313
4000.0	883.6	18.3	69.4	1027.2	674.7	177.0	6.2	1.000317
3800.0	889.5	18.6	69.1	1032.3	675.3	176.2	7.5	1.000321
3600.0	895.4	18.9	68.8	1037.4	675.9	175.4	8.2	1.000325
3400.0	901.3	19.2	68.5	1042.5	676.5	174.6	9.0	1.000329
3200.0	907.2	19.5	68.2	1047.6	677.1	173.8	9.8	1.000333
3000.0	913.1	19.8	67.9	1052.7	677.7	173.0	10.0	1.000337
2800.0	919.0	20.1	67.6	1057.8	678.3	172.2	10.0	1.000341
2600.0	924.9	20.4	67.3	1062.9	678.9	171.4	9.6	1.000345
2400.0	930.8	20.7	67.0	1068.0	679.5	170.6	9.3	1.000349
2200.0	936.7	21.0	66.7	1073.1	680.1	169.8	8.8	1.000353
2000.0	942.6	21.3	66.4	1078.2	680.7	169.0	8.3	1.000357
1800.0	948.5	21.6	66.1	1083.3	681.3	168.2	7.8	1.000361
1600.0	954.4	21.9	65.8	1088.4	681.9	167.4	7.3	1.000365
1400.0	960.3	22.2	65.5	1093.5	682.5	166.6	6.9	1.000369
1200.0	966.2	22.5	65.2	1098.6	683.1	165.8	6.6	1.000373
1000.0	972.1	22.8	64.9	1103.7	683.7	165.0	6.2	1.000377
800.0	978.0	23.1	64.6	1108.8	684.3	164.2	5.8	1.000381
600.0	983.9	23.4	64.3	1113.9	684.9	163.4	5.4	1.000385
400.0	989.8	23.7	64.0	1119.0	685.5	162.6	5.0	1.000389
200.0	995.7	24.0	63.7	1124.1	686.1	161.8	4.6	1.000393
0.0	1001.6	24.3	63.4	1129.2	686.7	161.0	4.2	1.000397

UPPER AIR DATA
 570020437
 WHITE SANDS

STATION ALTITUDE 505.0 FEET MSL
 14 SEP. 53
 1000 MDT
 ASCENSION NO. 427

GEODETIC COORDINATES
 52.40047 LAT DEG
 106.77033 LON DEG

TABLE 12 Con't

GEOMETRIC ALTITUDE FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA			INDEX OF REFRACTION
							DIRECTION DEGREES(TN)	SPEED KNOTS	REFRACTION	
1100.0	607.5	5.5	4.3	92.1	830.9	651.9	206.9	6.6	1.000226	
1200.0	606.9	5.1	4.0	92.9	826.2	651.5	211.9	6.7	1.000224	
1300.0	605.0	4.9	3.7	93.7	821.5	650.8	217.0	6.1	1.000222	
1400.0	603.1	4.2	3.4	94.5	816.8	650.2	217.1	6.0	1.000220	
1500.0	602.3	3.7	3.0	95.5	812.1	649.7	220.7	6.0	1.000219	
1600.0	603.5	3.2	2.4	93.8	807.6	649.1	224.3	6.0	1.000216	
1700.0	603.7	2.8	-1.1	75.7	807.7	648.2	227.8	6.0	1.000207	
1800.0	603.9	2.7	-1.5	74.1	799.0	648.1	231.7	6.1	1.000205	
1900.0	604.2	2.8	-1.5	73.0	791.7	648.2	234.2	6.4	1.000204	
2000.0	604.5	3.4	-1.0	73.0	784.0	649.0	236.5	6.9	1.000203	
2100.0	619.6	3.4	-0.9	73.4	778.0	649.0	238.5	7.3	1.000202	
2200.0	615.2	2.7	-1.2	73.9	773.7	648.4	240.3	7.8	1.000200	
2300.0	610.0	2.4	-1.7	74.5	769.6	647.7			1.000198	
2400.0	606.0	1.7	-2.1	75.2	765.2	647.1			1.000197	
2500.0	601.5	1.3	-2.5	75.8	761.0	646.5			1.000195	
2600.0	597.0	.9	-3.1	75.0	756.6	645.9			1.000193	
2700.0	592.5	.4	-3.7	73.7	752.3	645.3			1.000191	
2800.0	588.0	-.1	-4.4	72.4	747.9	644.7			1.000189	

STATION ALTITUDE 209.70 FEET MSL
 14 SEP 37
 ASCENSION NO. 437

MANDATORY LEVELS
 570020437
 WHITE SANDS

GEOMETRIC COORDINATES
 32.5034° LAT DEG
 106.3703° LONG DEG

TABLE 13

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
30.0	5145.	18.7	13.8	73.	146.9	5.0
50.0	6844.	14.0	12.7	90.	156.5	7.7
70.0	8629.	11.7	10.4	91.	185.7	8.2
90.0	10519.	8.4	6.4	87.	202.8	7.5
100.0	12518.	3.9	3.1	95.	219.4	6.0
100.0	14648.	1.2	-2.6	76.		

STATION ALTITUDE 4051.77 FEET MSL
 14 SEP. 53
 ASCENSION NO. 113 1119 MDT

SIGNIFICANT LEVEL DATA
 5701R0116
 LC-37

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.51232 LON DEG

TABLE 14

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
833.0	4051.4	26.2	52.0
827.0	4247.0	22.5	54.0
820.0	5139.7	20.3	65.0
809.8	6544.5	16.3	81.0
788.0	7985.4	12.8	95.0
746.7	8830.4	11.2	96.0
700.0	10533.0	8.3	94.0
672.6	11618.6	6.5	93.0
641.8	12880.3	3.9	94.0
626.5	13522.7	4.4	73.0
573.4	15879.7	-0.7	77.0

STATION ALTITUDE 4051.77 FEET MSL
 14 SEP 67
 ACQUISITION NO. 112

UPPER AIR DATA
 4 570120116
 16-57

GEODLTIC COORDINATES
 32.40175 LAT DEG
 106.31233 LON DEG

TABLE 15 Con't

GEOMETRIC ALTITUDE FTSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPPOINT OF POINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES(TN)	SPEED KNOTS	
4051.4	652.0	16.2	15.6	52.0	1019.8	676.6	0	0	1.000302
4152.0	661.5	15.3	14.9	52.3	1021.5	675.5	147.8	0.2	1.000300
4200.0	676.5	13.4	13.4	53.5	1025.1	673.1	147.8	0.5	1.000295
4306.0	676.4	12.4	12.0	54.0	1025.3	671.9	147.8	0.9	1.000293
4400.0	672.3	12.1	12.9	53.9	1022.5	671.6	147.8	1.3	1.000293
4500.0	669.2	11.7	13.0	57.1	1019.7	671.3	147.8	1.6	1.000293
4600.0	666.2	11.0	13.1	56.3	1017.0	671.1	147.8	2.0	1.000293
4700.0	663.4	11.4	13.2	59.0	1014.2	670.8	147.8	2.4	1.000292
4800.0	660.2	11.1	13.3	60.8	1011.4	670.6	147.8	2.7	1.000292
4900.0	657.2	10.7	13.4	62.0	1008.7	670.3	147.8	3.1	1.000292
5000.0	654.0	10.0	13.4	63.3	1005.9	670.3	147.8	3.5	1.000292
5100.0	651.2	10.4	13.5	64.5	1003.2	669.8	147.8	3.8	1.000292
5200.0	648.2	10.1	13.5	65.7	1000.5	669.5	147.8	4.2	1.000291
5300.0	645.2	19.0	13.5	66.8	998.0	669.2	147.8	4.5	1.000291
5400.0	642.2	19.6	13.5	68.0	995.4	668.8	147.8	4.9	1.000290
5500.0	639.2	19.0	13.5	69.1	992.8	668.5	147.8	5.3	1.000290
5600.0	636.0	19.0	13.5	70.4	990.2	668.2	147.8	5.6	1.000289
5700.0	633.3	18.7	13.4	71.4	987.7	667.9	147.7	5.9	1.000289
5800.0	630.4	18.4	13.4	72.5	985.2	667.6	147.4	5.9	1.000288
5900.0	627.4	18.1	13.4	73.7	982.6	667.2	147.1	5.0	1.000288
6000.0	624.0	17.0	13.3	74.6	980.1	666.9	146.8	6.0	1.000287
6100.0	621.6	17.6	13.3	76.0	977.6	666.6	146.4	6.0	1.000286
6200.0	618.7	17.3	13.2	77.1	975.1	666.3	146.3	6.0	1.000286
6300.0	615.0	17.0	13.2	78.2	972.6	665.9	146.0	6.0	1.000285
6400.0	612.9	16.7	13.1	79.4	970.1	665.6	145.8	6.0	1.000284
6500.0	610.0	16.4	13.1	80.5	967.6	665.3	145.5	6.1	1.000284
6600.0	607.1	16.2	13.0	81.6	965.1	665.0	145.0	6.1	1.000283
6700.0	604.2	15.7	12.9	82.5	962.6	664.7	144.6	6.1	1.000282
6800.0	601.4	15.7	12.9	83.5	959.9	664.4	147.4	6.1	1.000282
6900.0	799.5	15.4	12.8	84.5	957.1	664.1	148.1	6.1	1.000281
7000.0	795.6	15.2	12.6	85.4	954.5	663.9	148.3	6.1	1.000280
7100.0	792.0	14.7	12.7	86.4	951.9	663.6	145.8	6.1	1.000279
7200.0	788.9	14.7	12.6	87.4	949.3	663.3	150.2	6.1	1.000279
7300.0	787.1	14.3	12.6	88.3	946.7	663.0	150.0	6.1	1.000278
7400.0	784.3	14.2	12.5	89.3	944.1	662.7	152.3	6.1	1.000277
7500.0	781.5	14.0	12.4	90.3	941.5	662.5	156.6	6.0	1.000276
7600.0	778.7	13.7	12.3	91.3	939.0	662.2	161.1	5.9	1.000275
7700.0	775.9	13.5	12.3	92.4	936.4	661.9	165.7	5.8	1.000275
7800.0	773.1	13.2	12.2	93.2	933.9	661.6	170.3	5.8	1.000274
7900.0	770.4	13.1	12.1	94.2	931.3	661.3	175.0	5.8	1.000273

STATION ALTITUDE 4021.77 FEET MSL
 14 SEP. 62
 ASCENSION NO. 116

UPPER AIR DATA
 270180116
 LC-57

GEOMETRIC COORDINATES
 32.40175 LAT DEG
 106.31232 LONG DEG

TABLE 15 Con't

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
1000.0	757.0	12.0	95.0	928.8	661.0	179.6	5.0	1.000272
1100.0	744.6	12.0	95.1	724.1	660.8	164.1	6.0	1.000271
1200.0	732.1	11.7	95.3	527.4	660.6	169.4	6.1	1.000270
1300.0	719.5	11.5	95.4	920.7	660.3	171.1	6.3	1.000269
1400.0	706.6	11.3	95.5	918.0	660.1	173.1	6.5	1.000267
1500.0	693.0	11.2	95.6	915.3	659.9	175.0	6.7	1.000266
1600.0	679.0	11.0	95.7	912.7	659.6	176.8	6.9	1.000265
1700.0	665.4	10.8	95.8	910.0	659.4	178.5	7.1	1.000264
1800.0	651.7	10.6	96.0	907.4	659.2	200.1	7.3	1.000262
1900.0	638.0	10.5	95.9	904.6	659.0	201.6	7.5	1.000261
2000.0	624.3	10.3	95.8	901.8	658.8	203.1	7.7	1.000260
2100.0	610.7	10.2	95.7	899.0	658.6	204.4	8.0	1.000259
2200.0	607.2	10.0	95.6	896.3	658.4	205.6	8.1	1.000258
2300.0	603.6	9.8	95.5	893.5	658.2	206.7	8.1	1.000258
2400.0	600.0	9.7	95.3	890.7	658.1	207.8	8.1	1.000255
2500.0	596.4	9.5	95.2	887.9	657.9	209.0	8.1	1.000254
2600.0	592.8	9.4	95.1	885.2	657.7	210.1	8.2	1.000253
2700.0	589.2	9.2	95.0	882.5	657.5	211.2	8.2	1.000252
2800.0	585.6	9.1	94.9	879.7	657.4	212.3	8.3	1.000251
2900.0	582.0	8.9	94.7	877.0	657.2	213.4	8.3	1.000250
3000.0	578.4	8.7	94.6	874.3	657.0	214.4	8.3	1.000249
3100.0	574.8	8.6	94.5	871.6	656.8	214.5	8.4	1.000247
3200.0	571.2	8.4	94.4	868.9	656.6	214.3	8.5	1.000246
3300.0	567.6	8.3	94.3	866.2	656.5	214.0	8.5	1.000245
3400.0	564.0	8.1	94.2	863.5	656.3	213.8	8.6	1.000244
3500.0	560.4	8.0	94.0	860.8	656.1	213.6	8.6	1.000243
3600.0	556.8	7.9	93.9	858.1	655.9	213.4	8.7	1.000242
3700.0	553.2	7.7	93.8	855.4	655.6	213.2	8.8	1.000240
3800.0	549.6	7.5	93.8	852.6	655.3	213.0	8.8	1.000239
3900.0	546.0	7.4	93.7	850.0	655.1	212.7	8.9	1.000238
4000.0	542.4	7.3	93.6	848.5	654.8	212.6	9.0	1.000237
4100.0	538.8	7.0	93.5	846.1	654.5	212.4	9.1	1.000235
4200.0	535.2	6.8	93.4	843.7	654.3	212.2	9.3	1.000234
4300.0	531.6	6.7	93.3	841.3	654.0	212.0	9.4	1.000233
4400.0	528.0	6.6	93.2	838.9	653.7	211.8	9.5	1.000232
4500.0	524.4	6.4	93.1	836.5	653.5	211.7	9.7	1.000231
4600.0	520.8	6.3	93.0	834.1	653.2	211.6	9.8	1.000230
4700.0	517.2	6.1	93.1	831.7	652.9	211.4	9.9	1.000229
4800.0	513.6	6.0	93.1	829.3	652.7	211.3	10.1	1.000227
4900.0	510.0	5.9	93.2	826.9	652.4	211.2	10.1	1.000226

UPPER AIR DATA
 4570180116
 LC-37

STATION ALTITUDE 4031.77 FEET MSL
 14 SEP 55
 ASCENSION NO. 110

1119 MDT

GEODETIC COORDINATES
 32.60175 LAT DEG
 106.31252 LON DEG

TABLE 15 Con't

GEOMETRIC ALTITUDE ASL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPPOINT OF POINT	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
1000.0	660.1	5.7	4.7	93.5	844.5	652.1	212.5	10.0	1.000225
1100.0	660.7	5.5	4.5	93.4	842.1	651.9	213.4	9.9	1.000224
1200.0	658.2	5.3	4.3	93.5	819.7	651.6	214.3	9.8	1.000223
1300.0	655.6	5.0	4.1	93.5	817.3	651.3	215.3	9.8	1.000222
1400.0	653.4	4.8	3.9	93.6	815.0	651.1	216.3	9.7	1.000221
1500.0	650.9	4.6	3.7	93.7	812.5	650.8	217.2	9.6	1.000220
1600.0	648.5	4.4	3.5	93.8	810.3	650.5	218.2	9.5	1.000219
1700.0	646.1	4.2	3.3	93.9	807.9	650.3	219.2	9.5	1.000218
1800.0	643.7	4.0	3.1	93.9	805.6	650.0	221.4	9.3	1.000217
1900.0	641.3	3.8	2.9	93.4	803.1	649.8	223.8	9.2	1.000216
2000.0	638.9	3.7	2.8	90.1	799.9	649.9	226.7	9.1	1.000214
2100.0	636.6	4.0	2.0	86.8	796.8	649.9	228.7	9.0	1.000212
2200.0	634.2	4.1	1.6	83.5	793.6	650.0	231.7	8.9	1.000211
2300.0	631.8	4.2	1.1	80.3	790.5	650.1	233.0	8.8	1.000209
2400.0	629.5	4.3	.6	77.0	787.4	650.1	236.6	8.8	1.000207
2500.0	627.1	4.4	.1	73.7	784.3	650.2	239.7	8.7	1.000205
2600.0	624.8	4.2	-.1	73.1	781.8	650.0	241.7	8.5	1.000204
2700.0	622.4	4.0	-.3	73.3	779.5	649.6	243.8	8.9	1.000203
2800.0	620.1	3.8	-.5	73.5	777.2	649.5	245.8	9.0	1.000202
2900.0	617.8	3.6	-.7	73.6	774.9	649.2	247.8	9.1	1.000201
3000.0	615.4	3.4	-.8	73.8	772.5	649.0	249.7	9.2	1.000201
3100.0	613.1	3.2	-1.0	74.0	770.2	648.7	251.5	9.4	1.000200
3200.0	610.8	2.9	-1.2	74.1	768.1	648.6	253.7	9.5	1.000199
3300.0	608.5	2.7	-1.4	74.3	765.9	648.2	255.1	9.7	1.000198
3400.0	606.2	2.5	-1.6	74.5	763.6	647.9	256.7	9.9	1.000197
3500.0	604.0	2.3	-1.8	74.7	761.3	647.6			1.000197
3600.0	601.7	2.1	-1.9	74.8	759.1	647.4			1.000196
3700.0	599.4	1.9	-2.1	75.0	756.9	647.1			1.000195
3800.0	597.2	1.6	-2.3	75.2	754.6	646.9			1.000194
3900.0	594.9	1.4	-2.5	75.3	752.4	646.6			1.000193
4000.0	592.7	1.2	-2.6	75.5	750.2	646.3			1.000192
4100.0	590.5	1.0	-2.8	75.7	748.0	646.1			1.000192
4200.0	588.3	.8	-3.0	75.6	745.8	645.8			1.000191
4300.0	586.1	.6	-3.2	75.0	743.6	645.5			1.000190
4400.0	583.8	.4	-3.4	76.2	741.4	645.3			1.000189
4500.0	581.7	.3	-3.5	76.4	739.2	645.0			1.000189
4600.0	579.5	-.1	-3.7	76.5	737.0	644.7			1.000188
4700.0	577.2	-.3	-3.9	76.7	734.8	644.5			1.000187
4800.0	575.1	-.5	-4.1	76.9	732.7	644.2			1.000186

STATION ALTITUDE 4051.77 FEET MSL
 14 SEP 60
 ASCENSION NO. 116 1119 MDT

MANDATORY LEVELS
 4570180116
 LC-37
 Table 16

GEODETTIC COORDINATES
 32.40175 LAT DEG
 104.31232 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CFNTIGRADE	DEWPOINT PERCENT	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
759.0	5126.	20.3	13.5	65.	147.8	4.0	
700.0	6843.	15.6	12.0	84.	147.7	6.1	
700.0	8637.	11.6	10.9	96.	197.5	6.9	
700.0	10523.	8.8	7.9	94.	213.5	8.7	
450.0	12526.	4.5	3.6	94.	217.6	9.6	
400.0	14663.	1.9	-2.1	75.			

L MED
8