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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
19304A MLRS, MISSILE NUMBER 1135, ROUND NUMBER V-103, 15 JANUAR--ETC(U)
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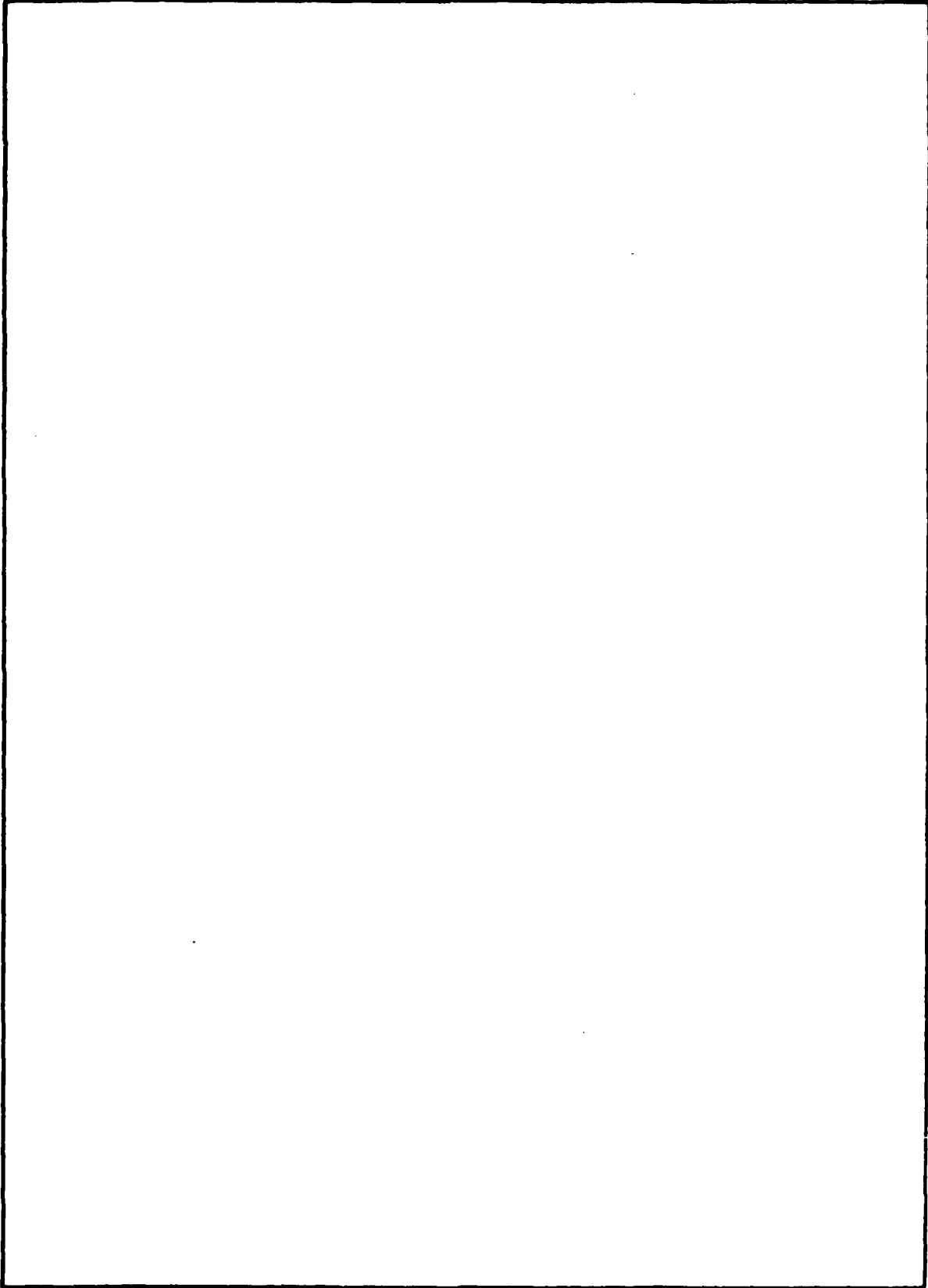
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19304A MLRS, Missile Number 1135, Round Number V-103 are presented in tabular form.			

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SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

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INTRODUCTION

19304A MLRS, Missile Number 1135, Round Number V-103,
was launched from LC-33, White Sands Missile Range (WSMR), New Mexico,
at 1434 MST on 15 January 1980. The scheduled launch time was
1430 MST.

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 pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPT5 T-9 pibal observation at:

SITE AND ALTITUDE

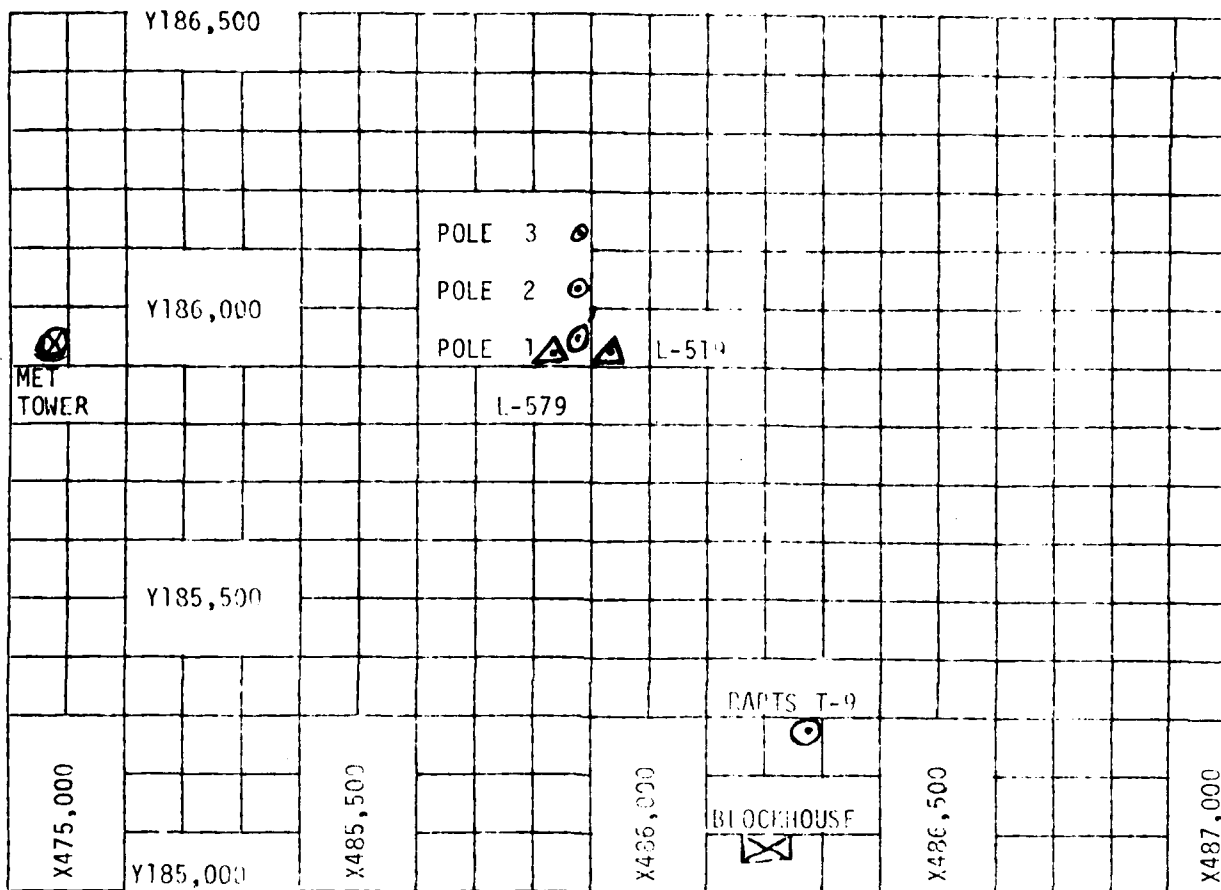
LC-33	2km
Nick	2km

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 87,000 feet in 500-foot increments.

SITE AND TIME

SMR 1430 MST

NORTH



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft.
 - (b) Pole #2 - 53.0 ft.
 - (c) Pole #3 - 83.6 ft.
3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

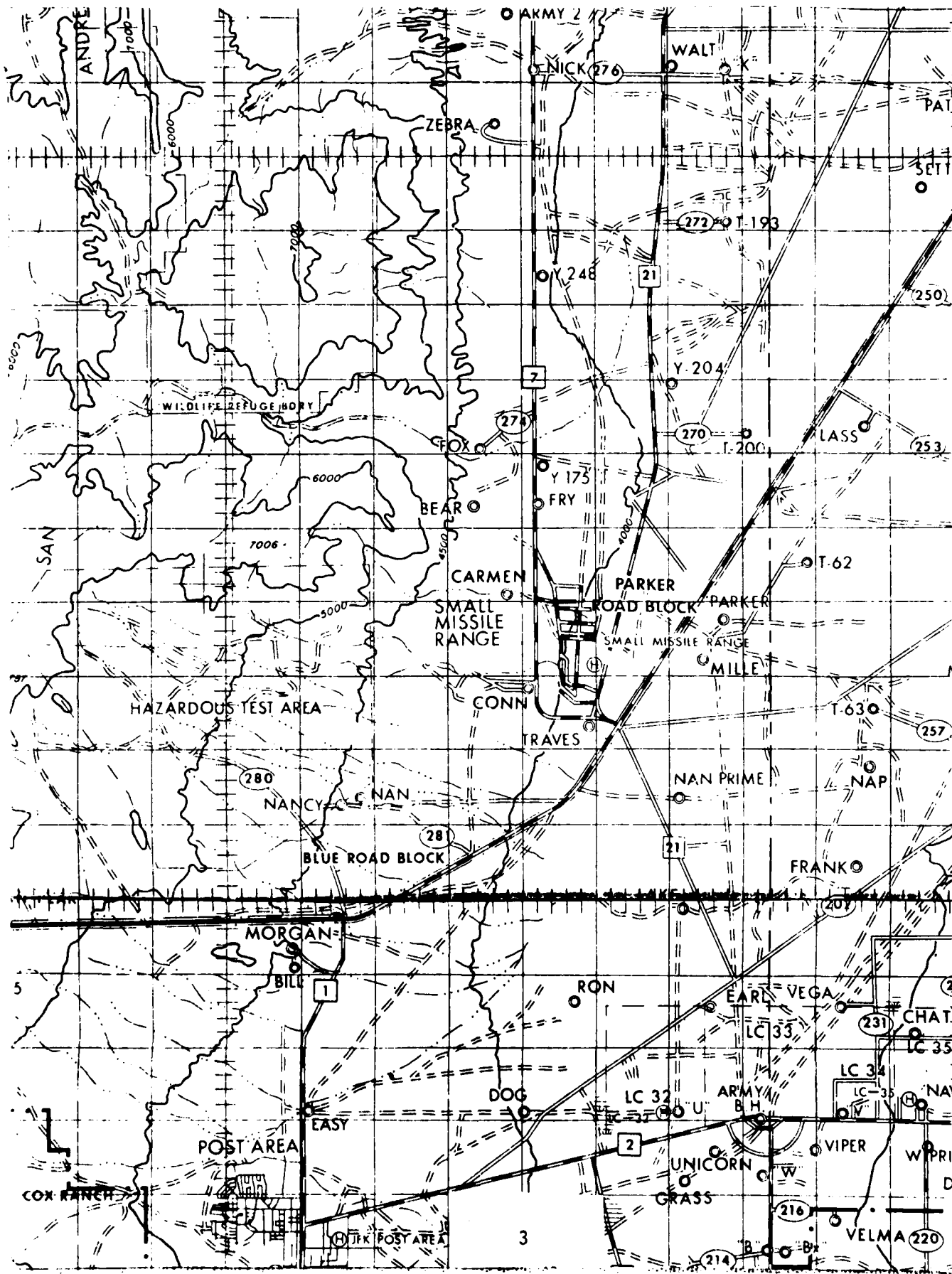


TABLE 1. Surface Observations taken at 1434 MST,
 15 January 1980, at LC-33, 19304A MLRS,
 Missile Number 1135, Round Number V-103.

ELEVATION	3977.30	FT/MSL
PRESSURE	876.6	MBS
TEMPERATURE	17.2	°C
RELATIVE HUMIDITY	40	%
DEW POINT	3.6	°C
DENSITY	1046	GM/M ³
WIND SPEED	12	KTS
WIND DIRECTION	240	DEGREES
CLOUD COVER	5	Cu

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	249	23	-30	252	16	-30	246	15
-20	248	18	-20	265	16	-20	250	15
-10	253	18	-10	270	15	-10	242	16
0.0	240	19	0.0	269	12	0.0	243	17
+10	238	19	+10	272	16	+10	246	13

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

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	231	14	-30	245	18
-20	231	16	-20	258	16
-10	225	14	-10	252	18
0.0	249	12	0.0	249	14
+10	247	11	+10	252	19

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	246	18	-30	242	19
-20	251	16	-20	242	20
-10	248	20	-10	243	21
0.0	250	20	0.0	242	21
+10	247	18	+10	239	21

STATION ALTITUDE 3997.30 FEET MSL
 15 JAN. 60
 ASCENSION NO. 8

SIGNIFICANT LEVEL DATA
 0150060008
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

TABLE 6

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
875.9	3997.3	16.3	2.3	39.0
850.0	4831.4	13.6	-0.8	37.0
732.9	8844.8	1.6	-4.5	64.0
721.6	9255.3	.0	-6.0	61.0
700.0	10052.9	-2.0	-5.1	79.0
686.7	10553.5	-3.2	-6.5	78.0
677.7	10896.6	-3.7	-9.3	65.0
632.7	12569.5	-7.0	-27.9	17.0
572.4	15208.3	-12.9	-32.2	18.0
539.2	16702.8	-14.0	-34.3	16.0
500.0	18572.9	-17.9	-36.9	17.0
417.1	22735.2	-28.9	-44.7	20.0
400.0	23914.7	-29.8	-46.4	18.0
367.9	25867.9	-33.0	-50.7	15.0
322.9	26855.0	-34.3		
303.4	30264.6	-38.8		
300.0	30520.4	-36.9		
292.7	31081.6	-36.9		
281.1	32006.8	-34.9		
269.7	32950.9	-34.5		
256.6	34098.4	-37.3		
250.0	34691.7	-36.9		
242.7	35366.8	-37.1		
207.7	38805.0	-40.8		
200.0	39729.1	-43.0		
184.9	41460.5	-44.7		
167.7	43598.2	-49.3		
150.0	45070.9	-56.4		
143.7	46869.5	-56.2		
108.6	52653.9	-62.5		
100.0	54314.6	-67.2		
87.4	56960.4	-71.7		
76.3	59640.7	-67.3		
70.0	61343.3	-70.4		
63.3	63309.0	-71.9		
58.3	64921.3	-69.3		
53.4	66678.4	-63.3		
50.0	68013.0	-61.9		
41.4	71885.3	-61.0		
34.4	75714.5	-58.4		

STATION ALTITUDE 3997.30 FEET MSL
15 JAN. 80 1430 HRS MST
DISCUSSION NO. 8

SIGNIFICANT LEVEL DATA
015006000g
S M R

GEODETTIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 6 (CONT)

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
30.0 78555.3	-59.3	
20.0 87133.3	-50.4	

STATION ALTITUDE 397.50 FEET MSL
 19. PARTIAL PRESSURE 1430 HRS MST
 ASCENSION NO. 8

UPPER AIR DATA
 0150060008
 S M R

TABLE 7

STATION GEOMETRIC COORDINATES
 122.8934 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS	WIND DIRECTION (DEGREES TN)	SPEED (KNOTS)	INDEX OF REFRACTION
397.5	875.9	16.3	39.0	1050.9	663.8	260.0	9.9	1.000267
400.0	875.9	16.3	39.0	1050.8	663.8	260.0	9.9	1.000267
450.0	869.2	14.7	37.8	1038.2	661.9	258.0	10.8	1.000260
500.0	844.7	13.1	33.1	1025.4	660.0	256.0	11.7	1.000255
550.0	829.3	11.6	41.5	1011.9	658.2	254.9	12.6	1.000252
600.0	814.1	10.1	44.9	998.6	656.3	253.0	13.4	1.000249
650.0	799.2	8.6	48.2	985.6	654.8	254.6	14.1	1.000245
700.0	784.6	7.1	51.6	972.8	653.0	262.0	14.3	1.000242
750.0	770.2	5.6	55.0	960.1	651.3	269.0	14.7	1.000238
800.0	756.1	4.1	58.3	947.7	649.5	274.1	15.9	1.000235
850.0	742.3	2.6	61.7	935.5	647.7	274.1	17.4	1.000231
900.0	728.6	1.0	62.9	923.9	645.7	281.1	18.5	1.000227
950.0	714.9	-0.6	66.5	911.9	643.8	283.5	19.4	1.000223
1000.0	688.1	-3.1	77.8	893.7	642.4	288.1	20.5	1.000222
1050.0	675.0	-3.9	82.2	885.7	640.9	288.1	21.8	1.000217
1100.0	662.0	-4.8	87.7	871.9	639.8	290.2	23.6	1.000209
1150.0	649.3	-5.8	93.9	853.5	638.5	292.1	25.8	1.000202
1200.0	635.9	-6.7	35.1	845.3	637.3	294.4	27.8	1.000196
1250.0	624.3	-7.8	21.6	832.2	636.1	296.2	29.6	1.000190
1300.0	612.3	-8.9	17.1	819.5	634.8	295.4	30.3	1.000186
1400.0	600.3	-10.1	17.3	807.0	633.4	293.2	30.7	1.000183
1450.0	588.6	-11.3	17.5	794.8	632.0	289.1	30.7	1.000180
1500.0	577.1	-12.4	17.7	782.7	630.6	286.7	30.6	1.000177
1550.0	565.8	-13.1	17.9	770.9	629.1	286.1	30.2	1.000174
1600.0	554.6	-13.5	17.6	757.7	628.3	287.1	28.9	1.000171
1650.0	543.6	-13.9	16.9	743.8	627.9	289.6	26.8	1.000168
1700.0	532.8	-14.6	16.3	730.1	627.4	292.0	25.0	1.000165
1750.0	522.1	-15.7	16.2	717.7	626.5	293.5	23.4	1.000162
1800.0	511.7	-16.7	16.4	706.3	625.2	294.6	21.8	1.000159
1850.0	501.3	-17.7	16.7	693.0	623.9	295.1	20.3	1.000156
1900.0	491.2	-19.0	17.0	683.9	622.7	294.7	18.5	1.000154
1950.0	481.1	-20.2	17.3	673.1	621.2	293.5	16.5	1.000151
2000.0	471.2	-21.5	17.6	662.6	619.6	292.1	15.8	1.000149
2050.0	461.3	-22.8	18.0	652.2	618.1	290.6	15.7	1.000146
2100.0	452.0	-24.0	18.3	642.0	616.5	292.2	18.9	1.000144
2150.0	442.7	-25.3	18.7	632.0	614.9	293.5	22.2	1.000142
2200.0	433.6	-26.5	19.0	622.2	613.4	295.6	24.8	1.000139
2250.0	424.7	-27.8	19.4	612.5	611.8	297.0	26.8	1.000137
2300.0	416.0	-29.0	19.7	603.0	610.3	297.1	26.1	1.000135
			19.9	593.3	608.8	295.6	25.9	1.000133

UPPER AIR DATA
 0150000006
 S M R

GEODETIC COORDINATES
 32.4034 LAT DEG
 106.42307 LON DEG

STATION ALTITUDE 3997.30 FEET MSL
 15 JAN. 80 1430 HRS MST
 OBSERVATION NO. 8

TABLE 7 (CONT)

GEOMETRIC ALTITUDE FEET	BAROMETRIC PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	407.2	-29.4	18.9	581.9	608.2	290.1	27.1	1.000130
24000.0	398.6	-29.9	17.9	570.9	607.6	286.9	30.6	1.000128
24500.0	390.1	-30.8	17.1	560.7	606.0	286.8	37.3	1.000125
25000.0	381.9	-31.6	16.3	550.6	605.5	289.9	42.8	1.000123
25500.0	373.8	-32.4	15.6	540.8	604.5	294.8	47.6	1.000121
26000.0	365.8	-33.2	14.3**	531.1	603.4	297.6	51.0	1.000119
26500.0	357.9	-34.1	11.8**	521.6	602.3	299.8	53.0	1.000116
27000.0	350.2	-35.0	9.3**	512.2	601.2	300.9	54.4	1.000114
27500.0	342.6	-35.9	6.8**	503.0	600.1	301.2	55.4	1.000112
28000.0	335.2	-36.8	4.3**	494.0	599.0	302.0	55.2	1.000110
28500.0	327.9	-37.7	1.8**	485.2	597.8	303.3	53.5	1.000108
29000.0	320.8	-38.5		476.0	597.0	304.1	51.5	1.000106
29500.0	313.8	-38.4		465.8	596.8	303.5	49.0	1.000104
30000.0	307.0	-38.5		455.8	596.7	301.8	47.3	1.000102
30500.0	300.5	-37.0		443.0	598.6	298.5	47.2	1.000099
31000.0	293.8	-36.9		433.2	598.8	295.5	47.6	1.000096
31500.0	287.4	-36.0		422.2	599.9	292.8	48.5	1.000094
32000.0	281.2	-34.9		411.2	601.3	290.6	48.0	1.000092
32500.0	275.1	-34.7		402.0	601.8	288.7	46.1	1.000090
33000.0	269.2	-34.6		393.2	601.7	286.4	44.0	1.000088
33500.0	263.4	-35.8		386.6	600.2	282.6	41.2	1.000086
34000.0	257.7	-37.1		380.3	598.6	278.3	38.8	1.000085
34500.0	252.1	-37.0		372.0	598.6	278.8	40.8	1.000083
35000.0	246.6	-37.0		363.8	598.7	279.2	42.9	1.000081
35500.0	241.3	-37.2		356.3	598.4	280.9	46.5	1.000079
36000.0	236.0	-37.8		349.3	597.7	282.7	50.5	1.000078
36500.0	230.8	-38.5		342.4	597.0	283.3	52.1	1.000076
37000.0	225.8	-38.8		335.6	596.4	283.3	52.1	1.000075
37500.0	220.8	-39.5		329.0	595.7	282.9	51.6	1.000073
38000.0	216.0	-39.9		322.6	595.0	281.8	50.1	1.000072
38500.0	211.5	-40.4		316.2	594.4	280.6	48.8	1.000070
39000.0	206.6	-41.1		310.2	593.5	278.5	48.5	1.000069
39500.0	202.1	-42.4		305.1	591.8	278.3	48.2	1.000068
40000.0	197.6	-43.3		299.4	590.7	274.8	49.1	1.000067
40500.0	193.2	-43.8		293.3	590.0	273.4	50.0	1.000065
41000.0	188.8	-44.2		287.4	589.4	275.1	52.8	1.000064
41500.0	184.6	-44.8		281.6	588.7	277.0	55.9	1.000063
42000.0	180.4	-45.9		276.5	587.3	279.1	58.1	1.000062
42500.0	176.4	-46.9		271.6	585.9	281.0	60.2	1.000060
43000.0	172.4	-48.0		266.7	584.6	280.8	59.2	1.000059

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

STATION ALTITUDE 9997.30 FEET MSL
 15 JAN 60 1430 HRS MST
 STATION NO. 8

UPPER AIR DATA
 0150060008
 S M R

GEODETIC COORDINATES
 32.48034 LAT UEG
 106.42307 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE FTL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
43500.0	160.5	-49.1		261.9	583.1	280.3	58.1	1.000058
44000.0	164.6	-50.5		257.5	581.3	280.8	57.7	1.000057
44500.0	168.7	-52.0		253.2	579.3	281.3	57.4	1.000056
45000.0	157.0	-53.5		249.0	577.4	281.7	57.4	1.000055
45500.0	153.4	-55.0		244.9	575.4	282.0	57.5	1.000055
46000.0	149.8	-56.4		240.7	573.6	282.4	57.3	1.000054
46500.0	146.3	-58.0		234.9	573.7	283.5	54.1	1.000052
47000.0	142.8	-58.5		229.4	573.9	285.0	50.9	1.000051
47500.0	139.4	-56.9		224.5	572.9	285.9	47.3	1.000050
48000.0	136.0	-57.4		219.7	572.2	286.5	43.6	1.000049
48500.0	132.8	-58.0		215.0	571.5	286.1	41.1	1.000048
49000.0	129.6	-58.5		210.4	570.7	284.3	40.2	1.000047
49500.0	126.5	-59.1		205.9	570.0	282.6	39.3	1.000046
50000.0	123.5	-59.6		201.5	569.3	281.4	38.5	1.000045
50500.0	120.5	-60.2		197.1	568.0	280.3	37.8	1.000044
51000.0	117.7	-60.7		192.9	567.8	278.3	34.6	1.000043
51500.0	114.8	-61.2		188.8	567.1	275.8	31.4	1.000042
52000.0	112.1	-61.8		184.7	566.4	272.1	24.5	1.000041
52500.0	109.4	-62.3		180.8	565.7	264.2	15.9	1.000040
53000.0	106.7	-63.5		177.4	564.1	245.8	9.1	1.000040
53500.0	104.1	-64.9		174.2	562.2	213.5	6.1	1.000039
54000.0	101.5	-66.3		171.1	560.3	185.6	6.6	1.000038
54500.0	99.1	-67.5		167.6	558.7	167.3	6.5	1.000037
55000.0	96.6	-68.4		164.3	557.5	177.7	6.1	1.000037
55500.0	94.2	-69.2		160.8	556.3	199.2	5.9	1.000036
56000.0	91.8	-70.1		157.5	555.2	229.9	7.2	1.000035
56500.0	89.5	-70.9		154.2	554.0	246.2	9.6	1.000034
57000.0	87.3	-71.6		150.8	553.0	250.3	11.7	1.000034
57500.0	85.1	-70.8		146.5	554.1	253.1	13.9	1.000033
58000.0	82.9	-70.0		142.2	555.3	246.0	11.8	1.000032
58500.0	80.9	-69.2		138.1	556.4	235.7	9.8	1.000031
59000.0	78.8	-68.4		134.1	557.5	221.5	7.3	1.000030
59500.0	76.8	-67.5		130.2	558.6	194.2	5.2	1.000029
60000.0	74.9	-66.8		127.2	558.1	149.5	5.7	1.000028
60500.0	73.1	-65.9		124.6	558.8	121.9	9.3	1.000028
61000.0	71.2	-64.8		122.0	555.6	111.2	13.6	1.000027
61500.0	69.4	-70.5		119.4	554.6	104.4	13.6	1.000027
62000.0	67.7	-70.9		116.6	554.0	105.7	14.1	1.000026
62500.0	66.0	-71.5		113.9	553.5	103.1	12.8	1.000025
63000.0	64.5	-71.7		111.2	553.0	99.7	11.0	1.000025

STATION ALTITUDE 3997.30 FEET MSL
 15 JAN. 80 1430 HRS MST
 ASCENSION NO. 8

UPPER AIR DATA
 015006000
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPLD OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION (DEGREES(T))	SPEED KNOTS	
63500.0	62.7	-71.6		109.3	553.1	78.3	9.9	1.000024
64000.0	61.1	-70.8		105.2	554.2	105.1	10.7	1.000023
64500.0	59.6	-70.0		102.1	555.3	111.0	11.6	1.000022
65000.0	58.1	-69.0		99.1	556.6	120.1	12.6	1.000021
65500.0	56.6	-67.3		95.9	558.9	128.7	13.9	1.000021
66000.0	55.2	-65.6		92.7	561.2	134.1	14.8	1.000021
66500.0	53.9	-63.9		89.7	563.5	135.1	14.3	1.000020
67000.0	52.6	-63.0		87.1	564.8	136.2	13.0	1.000019
67500.0	51.3	-62.4		84.8	565.5	134.3	11.0	1.000019
68000.0	50.0	-61.9		82.5	566.2	129.3	7.6	1.000018
68500.0	48.8	-61.8		80.5	566.4	118.5	4.2	1.000018
69000.0	47.7	-61.7		78.5	566.5	74.4	1.3	1.000017
69500.0	46.5	-61.6		76.6	566.7	337.5	3.0	1.000017
70000.0	45.4	-61.4		74.7	566.8	344.6	4.7	1.000017
70500.0	44.3	-61.3		72.9	567.0	350.4	6.1	1.000016
71000.0	43.2	-61.2		71.1	567.2	5.0	7.4	1.000016
71500.0	42.2	-61.1		69.3	567.3	10.3	7.9	1.000015
72000.0	41.2	-60.9		67.6	567.5	29.6	8.7	1.000015
72500.0	40.2	-60.6		65.9	568.0	33.0	9.1	1.000015
73000.0	39.2	-60.2		64.2	568.4	32.9	9.0	1.000014
73500.0	38.3	-59.9		62.6	568.9	32.2	9.2	1.000014
74000.0	37.4	-59.6		61.0	569.4	27.5	10.7	1.000014
74500.0	36.5	-59.2		59.4	569.8	24.0	12.3	1.000013
75000.0	35.6	-58.9		57.9	570.3	20.9	13.0	1.000013
75500.0	34.8	-58.5		56.4	570.7	17.6	12.9	1.000013
76000.0	33.9	-58.5		55.1	570.8	14.4	12.9	1.000012
76500.0	33.1	-58.6		53.8	570.6	13.7	12.7	1.000012
77000.0	32.3	-58.8		52.6	570.4	12.8	12.5	1.000012
77500.0	31.6	-59.0		51.3	570.2	9.3	12.5	1.000011
78000.0	30.8	-59.1		50.2	569.9	4.6	12.8	1.000011
78500.0	30.1	-59.3		49.0	569.7	.1	13.3	1.000011
79000.0	29.4	-58.8		47.8	570.3	354.0	13.6	1.000011
79500.0	28.7	-58.3		46.5	571.0	348.0	14.0	1.000010
80000.0	28.0	-57.8		45.3	571.7	342.6	14.7	1.000010
80500.0	27.4	-57.3		44.2	572.4	337.8	15.6	1.000010
81000.0	26.7	-56.8		43.0	573.1	333.5	16.6	1.000010
81500.0	26.1	-56.2		41.9	573.8	330.0	17.6	1.000009
82000.0	25.5	-55.7		40.8	574.4	327.0	18.7	1.000009
82500.0	24.9	-55.2		39.8	575.1	324.4	19.8	1.000009
83000.0	24.3	-54.7		38.8	575.8	323.7	20.3	1.000009

STATION ALTITUDE 3997.30 FEET MSL
 15 JAN. 80 1430 HMS MST
 ASCENSION NO. 8

UPPER AIR DATA
 0150060000
 S M R

TABLE 7 (CONT)

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42507 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
83500.0	23.7	-54.2		37.8	576.5	323.2	20.7	1.000008
84000.0	23.2	-53.7		36.8	577.2	321.6	21.1	1.000008
84500.0	22.7	-53.1		35.9	577.9	315.6	21.9	1.000008
85000.0	22.1	-52.6		34.9	578.5	310.1	22.8	1.000008
85500.0	21.6	-52.1		34.0	579.2			1.000008
86000.0	21.1	-51.6		33.2	579.9			1.000007
86500.0	20.6	-51.1		32.3	580.8			1.000007
87000.0	20.1	-50.5		31.5	581.3			1.000007

STATION ALTITUDE 3997.30 FEET MSL
 15 JAN. 80
 ASCENSION NO. 8

MANDATORY LEVELS
 0150060006
 S M R

TABLE 8

GEODETIC COORDINATES
 32.48034 LAT UEG
 106.42307 LON LEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4828.	13.6	-0.8	37.	256.9	11.4
800.0	6489.	8.7	-1.7	48.	254.6	14.1
750.0	8224.	3.5	-3.6	60.	276.0	16.6
700.0	10043.	-2.0	-5.1	79.	286.0	20.6
650.0	11964.	-5.7	-18.4	36.	294.2	27.6
600.0	14005.	-10.1	-30.1	18.	289.0	30.7
550.0	16187.	-13.6	-33.6	17.	291.0	26.0
500.0	18547.	-17.9	-36.9	17.	294.6	18.3
450.0	21100.	-24.3	-41.3	19.	294.0	22.8
400.0	23880.	-29.8	-46.4	18.	207.0	29.4
350.0	26970.	-35.0	-56.3	9.**	300.9	54.4
300.0	30461.	-36.9			298.5	47.2
250.0	34617.	-36.9			278.9	41.6
200.0	39634.	-43.0			275.7	48.6
175.0	42565.	-47.3			281.1	60.1
150.0	45847.	-56.4			282.2	57.6
125.0	49627.	-59.3			282.0	38.9
100.0	54147.	-67.2			153.3	6.8
80.0	58508.	-68.8			231.3	9.1
70.0	61133.	-70.4			109.5	13.7
60.0	64126.	-70.2			109.0	11.2
50.0	67764.	-61.9			129.5	7.7
40.0	72306.	-60.5			33.0	9.1
30.0	78222.	-59.3			360.0	13.3
25.0	82004.	-55.3			325.3	19.4
20.0	86728.	-50.4				

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