

AD-A987 452

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
197048 MRS, MISSILE NUMBER 197, ROUND NUMBER B-76, 25 JANUARY --ETC(U)
JAN 80

UNCLASSIFIED

ERADCOM/ASL-DR-1120

NL

1-1

1-1

1-1

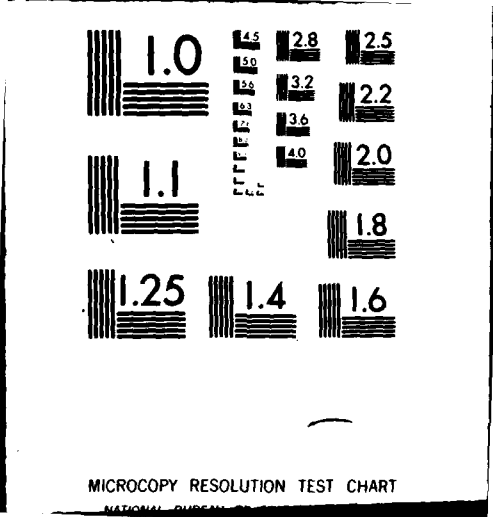
END

DATE

FILMED

9-80

DTIC



MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

269

DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

UNCLASSIFIED

14 ERADCOM/ASL-DR-1120

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1120	2. GOVT ACCESSION NO. AD-1087452	3. RECIPIENT'S CATALOG NUMBER
4. TITLE AND SUBTITLE 19704B MLRS, Missile Number 197, Round Number B-76, 25 January 1980.		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s) White Sands Meteorological data rept.		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS		8. CONTRACT OR GRANT NUMBER(s) 16 DA Task DF665702D127-02
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 12 15
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783		12. REPORT DATE 17 January 1980
16. DISTRIBUTION STATEMENT (of this Report)		13. NUMBER OF PAGES 14
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
18. SUPPLEMENTARY NOTES		16. DECLASSIFICATION/DOWNGRADING SCHEDULE
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 19704B MLRS, Missile Number 197, Round Number B-76 are presented in tabular form.		

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

410163

JOB

CONTENTS

INTRODUCTION-----	1
DISCUSSION-----	1
TABLES:	
1. Surface Observation taken at 1030 MST at D 3½-----	2
2. D 3½ Pilot-Balloon-Measured Wind Data at 1057 MST-----	3
3. NW 30 Significant Level Data at 1036 MST-----	4
4. NW 30 Upper Air Data at 1036 MST-----	5
5. NW 30 Mandatory Levels at 1036 MST-----	10

Accession For	
RTIS GRAM	<input checked="" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced Justification	<input type="checkbox"/>
By _____	
Distribution/	
Availability Codes	
Dist.	Avail and/or special
A	R3

INTRODUCTION

19704B MLRS, Missile Number 197, Round Number B-76,
was launched from Brillo, White Sands Missile Range (WSMR), New Mexico,
at 1036:11 MST, 25 January 1980. The scheduled launch time was 1000
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 D 3 $\frac{1}{2}$ 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

D 3 $\frac{1}{2}$ 2Km

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 83,500 feet in 500-foot increments.

SITE AND TIME

NW 30 1036 MST

TABLE 1. Surface Observations taken at 1030 MST,
 25 January 1980, at D 3 $\frac{1}{2}$, 19704B MLRS,
 Missile Number 197, Round Number B-76.

ELEVATION	3975	FT/MSL
PRESSURE	871.8	MBS
TEMPERATURE	9.0	$^{\circ}$ C
RELATIVE HUMIDITY	88	%
DEW POINT	7.2	$^{\circ}$ C
DENSITY	1071	GM/M ³
WIND SPEED	10	KTS
WIND DIRECTION	140	DEGREES
CLOUD COVER	4	Ci

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 60
 ASCENSION NO. 5

STGNIFICANT LEVEL DATA
 02502-0005
 NY 30

GEOMETIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

TABLE 3

PRESSURE GEOMETIC ALTITUDE		TEMPERATURE	REL. HUM.	
MILLIBARS	MSL FEET	AIR DEW POINT DEGREES CENTIGRADE	PERCENT	
871.6	4010.4	7.0	-1.4	55.0
850.0	4691.2	4.6	-8.0	46.0
834.6	5181.3	6.0	-5.9	42.0
765.0	7503.6	2.3	-8.7	44.0
755.4	7744.3	3.1	-9.2	40.0
700.0	9462.1	.6	-18.1	23.0
680.0	10627.0	1.1	-21.2	17.0
661.6	11342.9	.6	-22.5	16.0
591.4	14274.5	-5.6	-27.4	10.0
507.0	18517.1	-16.0	-34.2	19.0
469.8	20053.2	-18.5	-35.0	25.0
439.8	21654.3	-22.6	-35.0	31.0
432.6	22057.6	-22.9	-40.0	19.0
400.0	23929.7	-27.5	-43.9	19.0
350.8	26982.1	-33.6	-49.6	18.0
311.6	29582.0	-41.0		
300.0	30523.7	-42.4		
282.6	31550.1	-45.2		
250.0	34504.1	-52.1		
209.6	38197.7	-59.8		
205.2	38535.9	-57.4		
200.0	39172.2	-56.7		
196.0	39596.1	-54.8		
170.2	42567.3	-55.3		
150.0	45237.4	-53.2		
145.6	46163.5	-53.2		
122.3	49539.9	-54.8		
116.2	50537.7	-59.9		
107.0	52287.1	-59.9		
100.0	53672.2	-62.7		
87.2	56439.0	-65.6		
70.0	60875.5	-63.0		
60.0	64010.2	-62.8		
50.0	67761.3	-58.2		
42.2	71272.5	-60.3		
39.0	72484.4	-58.4		
30.0	78376.6	-57.4		
24.0	83045.5	-57.0		
20.0	86851.2	-58.6		
17.0	90726.3	-60.1		

UPPER AIR DATA
 025020005
 NW 30

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 60 1036 HRS MST
 ASCENSION 1.0. 5

GEODETIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

TABLE 4

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
4010.4	871.8	7.0	-1.4	55.0	1081.5	652.8	170.0	5.1	1.000266
4500.0	850.1	5.3	-4.7	48.5	1069.1	650.7	174.0	4.5	1.000259
5000.0	840.3	5.3	-5.9	43.5	1048.7	650.9	179.4	3.9	1.000253
5500.0	824.7	5.5	-6.3	42.3	1029.3	650.9	186.5	3.4	1.000248
6000.0	809.4	4.7	-6.9	42.7	1012.1	649.9	204.2	3.2	1.000244
6500.0	794.4	3.9	-7.5	43.1	997.3	649.0	220.5	3.6	1.000239
7000.0	779.7	3.1	-9.1	43.6	981.6	648.0	251.4	5.1	1.000235
7500.0	765.2	2.3	-9.7	44.0	965.3	647.1	265.9	7.5	1.000231
8000.0	751.0	2.9	-9.8	38.7	946.3	647.8	278.6	11.2	1.000225
8500.0	736.9	2.3	-11.8	34.5	930.9	647.0	283.1	14.7	1.000220
9000.0	723.2	1.7	-13.9	30.3	915.7	646.2	283.9	17.6	1.000214
9500.0	709.6	1.0	-16.2	26.1	900.8	645.4	285.9	18.9	1.000209
10000.0	696.4	.7	-18.6	21.9	885.2	644.9	288.2	19.7	1.000204
10500.0	683.3	1.0	-20.6	18.0	867.6	645.3	292.6	17.5	1.000199
11000.0	670.5	.8	-21.7	16.5	851.9	645.0	298.4	15.2	1.000193
11500.0	657.8	.5	-22.5	16.0	837.7	644.4	306.1	14.0	1.000187
12000.0	645.3	.8	-23.4	16.0	825.0	643.1	313.0	13.6	1.000182
12500.0	633.1	-1.8	-24.3	16.0	812.5	641.8	314.7	14.8	1.000175
13000.0	621.0	-2.9	-25.1	16.0	800.2	640.6	313.2	15.9	1.000172
13500.0	609.2	-4.0	-26.0	16.0	788.1	639.3	309.6	16.8	1.000179
14000.0	597.7	-5.0	-26.9	16.0	776.2	638.1	308.0	18.2	1.000176
14500.0	586.1	-6.2	-27.7	16.2	764.5	638.7	308.2	19.7	1.000174
15000.0	574.7	-7.4	-28.5	16.5	753.0	635.2	308.6	20.7	1.000171
15500.0	563.4	-8.6	-29.3	16.9	741.7	633.8	308.6	21.7	1.000168
16000.0	552.4	-9.8	-30.1	17.2	730.5	632.3	306.8	22.1	1.000165
16500.0	541.5	-11.1	-30.9	17.6	719.6	630.8	305.0	22.4	1.000163
17000.0	530.9	-12.3	-31.7	17.9	708.8	629.3	304.3	21.9	1.000160
17500.0	520.3	-13.5	-32.5	18.3	698.2	627.8	303.7	21.5	1.000158
18000.0	510.3	-14.7	-33.3	18.6	687.8	626.3	304.5	20.2	1.000155
18500.0	500.3	-16.0	-34.2	19.0	677.5	624.9	305.6	18.8	1.000153
19000.0	490.3	-16.8	-33.9	20.9	666.1	623.8	307.2	17.8	1.000150
19500.0	480.5	-17.6	-33.7	22.8	654.8	622.9	309.0	16.9	1.000148
20000.0	470.8	-18.4	-33.6	24.8	643.7	621.9	308.3	16.5	1.000145
20500.0	461.3	-19.6	-33.9	26.7	633.7	620.4	306.1	16.4	1.000143
21000.0	451.9	-20.9	-34.4	28.5	623.9	618.8	304.7	16.4	1.000141
21500.0	442.7	-22.2	-34.8	30.4	614.4	617.2	303.7	16.6	1.000139
22000.0	433.6	-22.9	-33.2	30.7	605.4	616.4	308.7	17.1	1.000136
22500.0	424.7	-24.0	-41.0	19.0	595.7	615.0	310.8	17.9	1.000133
23000.0	415.9	-25.2	-42.0	19.0	584.2	613.5	312.9	18.8	1.000131
23500.0	407.3	-26.4	-43.0	19.0	575.0	611.9	314.5	19.9	1.000129

UPPER AIR DATA
 0250220005
 NW 30

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 60 1036 HRS MST
 ASCENSION NO. 5

GEODETIC COORDINATES
 32-88497 LAT LEG
 106-49714 LONG LEG

TABLE 4 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION,
							DIRECTION DEGREES(TN)	SPEED KNOTS	
24000.0	398.8	-27.7	-44.1	19.0	565.9	610.4	315.3	19.5	1.000127
24500.0	390.4	-28.8	-45.1	18.8	556.5	609.0	316.1	19.0	1.000125
25000.0	382.1	-29.9	-46.2	18.6	547.3	607.6	317.4	18.3	1.000123
25500.0	374.0	-31.1	-47.3	18.4	538.2	606.1	318.9	17.5	1.000120
26000.0	366.1	-32.2	-48.3	18.2	529.3	604.7	319.5	18.1	1.000118
26500.0	358.4	-33.4	-49.4	18.0	520.6	603.3	320.0	18.7	1.000116
27000.0	350.6	-34.6	-51.6	15.7**	511.9	601.8	320.8	19.1	1.000114
27500.0	343.0	-35.8	-54.3	12.8**	503.3	600.3	321.6	19.5	1.000112
28000.0	335.5	-37.0	-57.4	9.8**	494.9	598.7	322.4	19.2	1.000110
28500.0	328.2	-38.2	-61.0	6.9**	486.6	597.2	323.2	18.6	1.000108
29000.0	321.1	-39.4	-66.0	4.0**	478.4	595.7	323.0	17.7	1.000107
29500.0	314.1	-40.6	-75.3	1.1**	470.5	594.1	319.9	16.0	1.000105
30000.0	307.2	-41.5			462.0	592.9	313.8	14.7	1.000103
30500.0	300.4	-42.4			453.4	591.8	305.5	16.2	1.000101
31000.0	293.7	-43.4			445.3	590.5	298.8	17.9	1.000099
31500.0	287.1	-44.5			437.4	589.1	294.1	20.1	1.000097
32000.0	280.7	-45.6			429.6	587.7	290.3	22.3	1.000096
32500.0	274.2	-46.9			422.2	586.0	287.5	22.4	1.000094
33000.0	268.0	-48.2			415.0	584.3	284.8	22.5	1.000092
33500.0	261.9	-49.5			407.9	582.9	283.7	22.7	1.000091
34000.0	255.9	-50.8			400.9	580.9	283.9	22.9	1.000089
34500.0	250.0	-52.1			394.0	579.2	283.9	23.0	1.000088
35000.0	244.2	-53.1			388.6	577.9	283.8	23.1	1.000086
35500.0	238.4	-54.2			383.3	576.5	287.5	23.0	1.000084
36000.0	232.8	-55.2			378.1	575.1	288.0	21.5	1.000083
36500.0	227.3	-56.3			363.1	573.7	288.5	19.9	1.000081
37000.0	221.9	-57.3			358.2	572.4	286.6	18.2	1.000080
37500.0	216.7	-58.3			351.4	571.0	283.6	16.5	1.000078
38000.0	211.6	-59.4			344.6	569.6	283.3	16.5	1.000077
38500.0	206.6	-58.1			334.7	571.2	284.7	17.7	1.000075
39000.0	201.7	-56.9			324.9	572.9	286.6	19.3	1.000072
39500.0	196.9	-55.2			314.8	575.1	290.0	22.6	1.000070
40000.0	192.3	-54.9			306.9	573.6	292.4	26.0	1.000068
40500.0	187.8	-55.0			299.8	575.5	292.8	27.6	1.000067
41000.0	183.4	-55.0			292.8	575.4	292.8	28.2	1.000065
41500.0	179.1	-55.1			286.1	575.2	290.1	29.8	1.000064
42000.0	174.8	-55.2			279.5	575.1	284.5	30.5	1.000062
42500.0	170.7	-55.3			273.0	575.0	273.6	31.6	1.000061
43000.0	166.8	-55.0			266.2	575.5	276.5	33.9	1.000059
43500.0	162.9	-54.6			259.5	576.0	277.5	36.1	1.000058

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

UPPER AIR DATA
0250220005
NW 30

STATION ALTITUDE +010.40 FEET MSL
25 JAN. 60 1036 HRS MST
ASCENSION NO. 5

GEODETTIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

TABLE 4 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARMS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
44600.0	159.0	-54.2		253.0	576.5	278.1	37.3	1.000056
44500.0	155.3	-53.8		246.7	577.0	279.2	37.9	1.000055
45000.0	151.7	-53.4		249.5	577.5	279.9	38.6	1.000054
45500.0	148.2	-53.2		254.7	577.8	279.2	39.6	1.000052
46000.0	144.7	-53.2		229.2	577.8	278.6	40.6	1.000051
46500.0	141.3	-53.8		224.4	577.0	278.4	42.1	1.000050
47000.0	138.0	-54.6		213.9	575.9	278.3	43.7	1.000049
47500.0	134.7	-55.4		213.6	574.8	278.2	45.6	1.000048
48000.0	131.6	-56.3		211.3	573.7	278.2	47.9	1.000047
48500.0	128.5	-57.1		207.1	572.6	278.2	50.2	1.000046
49000.0	125.4	-57.9		203.0	571.5	277.8	50.6	1.000045
49500.0	122.3	-58.7		199.0	570.4	277.3	50.6	1.000044
50000.0	119.6	-59.5		194.7	569.7	276.7	50.2	1.000043
50500.0	116.7	-59.8		190.5	569.0	275.2	46.4	1.000042
51000.0	113.9	-59.9		186.1	568.9	273.5	42.6	1.000041
51500.0	111.2	-59.9		181.6	568.9	272.0	39.7	1.000040
52000.0	108.5	-59.9		177.2	568.9	271.2	38.0	1.000039
52500.0	105.9	-60.3		173.3	568.3	270.3	36.3	1.000039
53000.0	103.3	-61.3		170.0	567.0	270.3	37.0	1.000038
53500.0	100.8	-62.4		166.7	565.0	270.5	38.0	1.000037
54000.0	98.4	-63.0		163.1	564.7	270.9	38.8	1.000036
54500.0	96.0	-63.6		159.5	564.0	271.8	39.2	1.000036
55000.0	93.6	-64.1		156.0	563.3	272.7	39.7	1.000035
55500.0	91.3	-64.6		152.6	562.6	273.5	39.4	1.000034
56000.0	89.1	-65.1		149.2	561.9	274.3	38.8	1.000033
56500.0	86.9	-65.6		145.9	561.3	275.0	38.2	1.000032
57000.0	84.8	-65.3		142.1	561.7	275.3	37.4	1.000032
57500.0	82.7	-65.0		138.5	562.1	275.6	36.5	1.000031
58000.0	80.7	-64.7		134.9	562.5	275.9	35.8	1.000030
58500.0	78.7	-64.4		131.4	562.9	276.0	35.4	1.000029
59000.0	76.8	-64.1		128.0	563.3	276.2	34.9	1.000029
59500.0	74.9	-63.8		124.7	563.7	276.5	34.4	1.000028
60000.0	73.1	-63.5		121.5	564.1	276.8	33.9	1.000027
60500.0	71.3	-63.2		118.3	564.5	277.1	33.4	1.000026
61000.0	69.6	-63.0		115.3	564.8	277.9	32.8	1.000026
61500.0	67.9	-63.0		112.5	564.6	278.9	32.1	1.000025
62000.0	66.2	-62.9		109.8	564.9	280.0	31.3	1.000024
62500.0	64.6	-62.9		107.1	564.9	281.3	31.2	1.000024
63000.0	63.1	-62.9		104.5	564.9	282.7	31.3	1.000023
63500.0	61.5	-62.8		101.9	565.0	284.1	31.5	1.000023

UPPER AIR DATA
 0250220005
 NW 30
 TABLE 4 (CONT)

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 80
 ASCESSION NO. 3
 1036 HRS MST

GEODETIC COORDINATES
 32.86497 LAT UEG
 106.49714 LONG LEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUMIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION UEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
6400.0	60.0	-62.8		99.4	565.0	284.7	30.2	1.000022
6450.0	58.6	-62.2		96.8	565.8	284.9	27.9	1.000022
6500.0	57.2	-61.6		94.2	566.7	285.1	25.7	1.000021
6550.0	55.8	-61.0		91.6	567.5	282.5	23.1	1.000020
6600.0	54.5	-60.4		89.2	568.3	276.5	20.3	1.000020
66500.0	53.2	-59.7		86.8	569.1	268.7	17.8	1.000019
67000.0	51.9	-59.1		84.5	569.9	264.1	17.3	1.000019
67500.0	50.6	-58.5		82.2	570.7	264.1	18.3	1.000018
68000.0	49.4	-58.3		80.2	571.0	264.0	19.4	1.000018
68500.0	48.2	-58.6		78.4	570.8	267.1	19.6	1.000017
69000.0	47.1	-58.9		76.6	570.2	274.0	19.0	1.000017
69500.0	46.0	-59.2		74.9	569.8	281.2	18.8	1.000017
70000.0	44.9	-59.5		73.2	569.4	287.7	18.5	1.000016
70500.0	43.8	-59.8		71.5	569.0	291.4	16.6	1.000016
71000.0	42.8	-60.1		69.9	568.6	296.0	14.2	1.000016
71500.0	41.7	-59.9		68.2	568.8	301.8	13.1	1.000015
7200.0	40.7	-59.2		66.3	569.9	307.7	12.5	1.000015
72500.0	39.8	-58.4		64.5	570.9	313.7	12.2	1.000014
73000.0	38.8	-58.3		63.0	571.0	320.0	12.1	1.000014
73500.0	37.9	-58.2		61.4	571.1	322.5	12.5	1.000014
74000.0	37.0	-58.1		60.0	571.2	321.8	13.3	1.000013
74500.0	36.1	-58.1		58.5	571.4	321.3	14.2	1.000013
75000.0	35.3	-58.0		57.1	571.5	320.8	15.0	1.000013
75500.0	34.4	-57.9		55.7	571.6	313.6	14.6	1.000012
76000.0	33.6	-57.8		54.4	571.7	309.5	14.2	1.000012
76500.0	32.8	-57.7		53.1	571.8	303.1	13.9	1.000012
77000.0	32.0	-57.6		51.8	571.9	297.3	13.6	1.000012
77500.0	31.3	-57.5		50.6	572.0	294.8	13.5	1.000011
78000.0	30.5	-57.5		49.3	572.1	292.3	13.2	1.000011
78500.0	29.8	-57.4		48.2	572.2	289.6	12.9	1.000011
79000.0	29.1	-57.3		47.0	572.3	286.8	12.8	1.000010
79500.0	28.4	-57.3		45.9	572.4	290.1	12.8	1.000010
80000.0	27.8	-57.3		44.8	572.4	291.6	12.8	1.000010
80500.0	27.1	-57.2		43.7	572.5	293.0	12.6	1.000010
81000.0	26.5	-57.2		42.7	572.5	294.6	12.6	1.000010
81500.0	25.8	-57.1		41.7	572.6	296.3	12.3	1.000009
82000.0	25.2	-57.1		40.7	572.6	298.1	12.0	1.000009
82500.0	24.6	-57.0		39.7	572.7	300.0	11.8	1.000009
83000.0	24.1	-57.0		38.8	572.8	301.1	12.4	1.000009
83500.0	23.5	-57.2		37.9	572.9	302.1	12.9	1.000008

UPPER AIR DATA
 0250220005
 NW 30

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 80 1036 HRS MST
 ASCENSION NO. 5

GEODETIC COORDINATES
 32.88497 LAT DEG
 106.49714 LON DEG

TABLE 4 (CONT)

GEOMETRIC ALTITUDE MSL 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	
84000.0	22.9	-57.4	37.0	572.2	303.0	303.0	13.5	1.000008
84500.0	22.4	-57.6	36.2	571.9	303.2	303.2	14.4	1.000008
85000.0	21.9	-57.8	35.4	571.7	301.9	301.9	15.7	1.000008
85500.0	21.3	-58.0	34.6	571.4	300.9	300.9	17.1	1.000008
86000.0	20.8	-58.2	33.8	571.1	300.0	300.0	18.5	1.000008
86500.0	20.3	-58.5	33.0	570.8	301.7	301.7	19.1	1.000007
87000.0	19.9	-58.7	32.3	570.5	304.8	304.8	19.3	1.000007
87500.0	19.4	-58.9	31.5	570.3	307.9	307.9	19.6	1.000007
88000.0	18.9	-59.1	30.8	570.0	310.9	310.9	19.9	1.000007
88500.0	18.3	-59.3	30.1	569.7				1.000007
89000.0	18.0	-59.6	29.4	569.4				1.000007
89500.0	17.6	-59.8	28.7	569.1				1.000006
90000.0	17.2	-60.0	28.1	568.8				1.000006

STATION ALTITUDE 4010.40 FEET MSL
 25 JAN. 60
 ASCENSION NO. 5

MANDATORY LEVELS
 0250220005
 NW 30
 TABLE 5

GEODETIC COORDINATES
 52.88497 LAT DEG
 106.49714 LON DEG

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE		REL. HUMID. PERCENT	WIND DATA	
		AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4698.	4.6	-6.0	46.	175.9	4.3
800.0	6312.	4.2	-7.2	43.	218.9	3.4
750.0	8028.	2.9	-9.9	38.	279.2	11.4
700.0	9853.	.6	-18.1	23.	287.6	19.5
650.0	11804.	-.4	-23.1	16.	311.6	13.3
600.0	13686.	-4.8	-26.7	16.	308.7	17.9
550.0	16109.	-10.1	-30.2	17.	306.5	22.1
500.0	18492.	-16.0	-34.2	19.	305.7	18.8
450.0	21073.	-21.2	-34.4	19.	304.5	16.5
400.0	23891.	-27.5	-43.9	19.	315.2	19.6
350.0	26998.	-34.7	-51.8	15.**	320.9	19.2
300.0	30470.	-42.4			305.5	16.2
250.0	34431.	-52.1			283.9	23.0
200.0	39091.	-56.7			287.8	20.3
175.0	41879.	-55.2			284.9	30.4
150.0	45119.	-53.2			279.6	39.1
125.0	48940.	-53.0			277.7	50.6
100.0	53510.	-62.7			270.5	38.3
80.0	57994.	-64.6			275.9	35.7
70.0	60671.	-63.0			277.6	33.0
60.0	63785.	-62.8			284.7	30.3
50.0	67511.	-58.2			264.0	18.8
40.0	72007.	-58.6			311.8	12.3
30.0	78047.	-57.4			290.4	13.0
25.0	81830.	-57.1			298.7	12.0
20.0	86451.	-58.6			303.6	19.2

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