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METEOROLOGICAL DATA REPORT

19304D GRS
Missile Nos. 1076, 1084, 1086
Round Nos. V-76, V-77, V-78
18 October 1979

By

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19304D GSRs, Missi'e Numbers 1075, 1084, 1086, Round Numbers V-76, V-77, V-78 are presented in tabular form.		

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CONTENTS

	PAGE
INTRODUCTION-----	1
DISCUSSION-----	1
LAUNCH AREA MAP-----	2
GENERAL AREA MAP-----	3
TABLES	
1. Surface Observations taken at 0950 MDT at LC-33-----	4
2. Anemometer Measured Wind Speed and Direction, LC-33 Fixed Pole, taken at 0950 MDT-----	5
3. Anemometer Measured Wind Speed and Direction, Tower Levels 1, 2, 3 and 4, taken at 0950 MDT-----	6
4. LC-33 Pilot Balloon Measured Wind Data at 0950 MDT-----	7
5. NICK SITE Pilot Balloon Measured Wind Data at 0950 MDT-----	8
6. SMR Significant Level Data at 0845 MST-----	9
7. SMR Upper Air Data at 0845 MST-----	10
8. SMR Mandatory Levels at 0845 MST-----	15

INTRODUCTION

19304D GSRS, Missile Numbers 1075, 1084, 1086, Round Numbers V-76, V-77 and V-78, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0950, 0950:03, 0950:08 MDT. 18 October 1979. The scheduled launch times were 0945, 0945:02.5, 0945:05 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 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 RPTS T-9 pibal observation at:

SITE AND ALTITUDE

LC-33	2Km
NICK	2Km

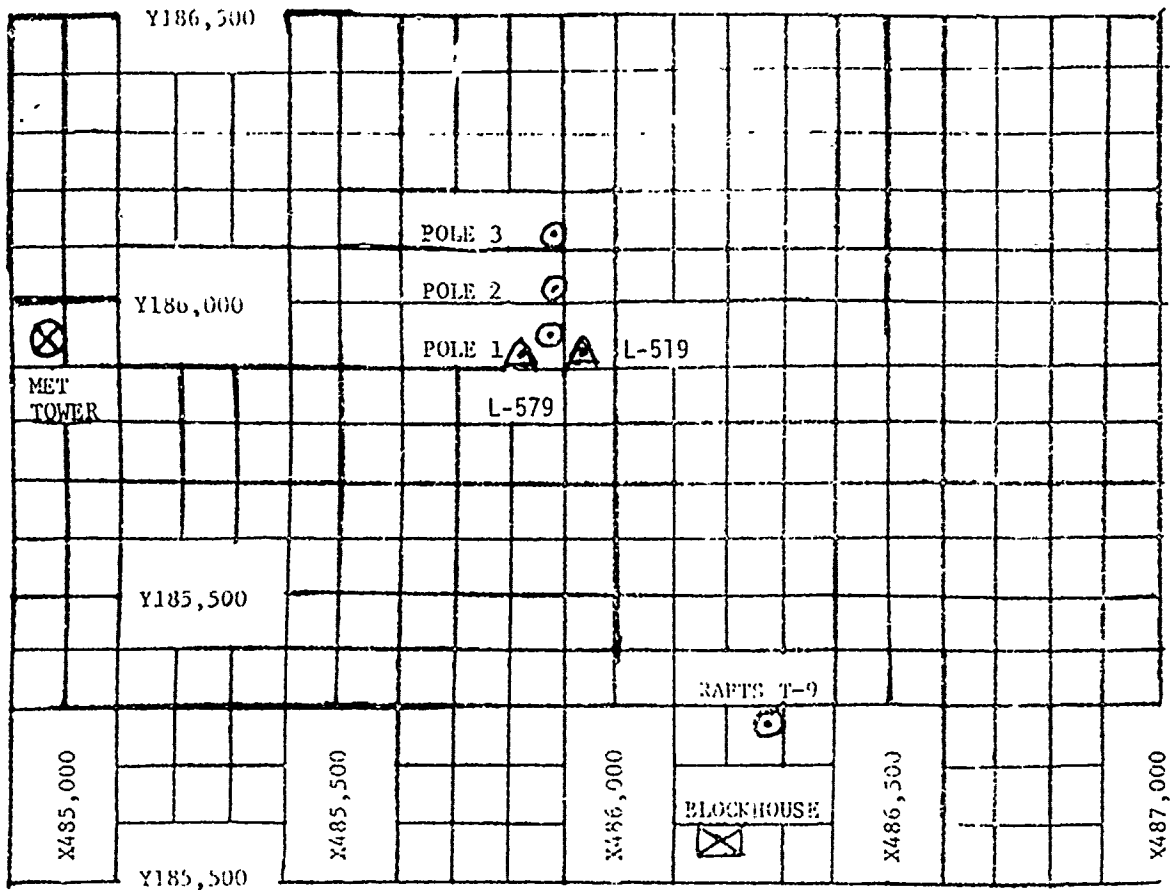
(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 84,000 feet in 500-foot increments.

SITE AND TIME

SMR 0845 MST

Accession For	
NTIS GAT&I	<input checked="" type="checkbox"/>
D&C TAB	
Unannounced Justification	
By _____	
Distribution/ _____	
Availability Codes	
Dist	Availa d/or special
A	23

NORTH



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 31 ft, 102 ft, and 202 ft with P/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with L/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 0952 MDT, 18 October 1979, at LC-33, 19304D GSRS, Missile Numbers 1075, 1084, 1086, Round Numbers V-76, V-77, V-78.

ELEVATION	3977.30	FT/MSL
PRESSURE	880.4	MBS
TEMPERATURE	19.5	°C
RELATIVE HUMIDITY	64	%
DEW POINT	12.5	°C
DENSITY	1041	GM/M ³
WIND SPEED	CALM	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	5	Sc

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30		CALM	-30	163	01	-30	170	01
-20		CALM	-20	163	01	-20	158	01
-10		CALM	-10	163	02	-10	157	01
0.0		CALM	0.0	163	02	0.0	156	01
+10		CALM	+10	156	02	+10	135	01

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

TABLE 2

TYPE 19304D GSRS MISSILE NOS. 1075, 1084, 1086 ROUND NOS. V-76, V-77, V-78

LAUNCHED FROM LC-33 DATE 18 October 1979 TIMES 0952:01, 0952:03,
0952:08 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

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

LEVEL #1 12 Feet			LEVEL #2 62 Feet		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30		CALM	-30		CALM
-20		CALM	-20		CALM
-10		CALM	-10	247	01
0.0	220	02	0.0	248	02
+10	220	01	+10	253	02
LEVEL #3 102 Feet			LEVEL #4 202 Feet		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	239	01	-30		CALM
-20		CALM	-20		CALM
-10		CALM	-10		CALM
0.0		CALM	0.0		CALM
+10		CALM	+10		CALM

WTSM COORDINATES: X484,982.64 Y185,057.73 H3983.00 (base)

TABLE 3

TYPE 19304D GSRS MISSILE NOS, 1075, 1084, 1085 ROUND NOS. V-76, V-77, V-78

LAUNCHED FROM LC-33 DATE 18 October 1979 TIMES 0952:01, 0952:03, 0952:08

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

STATION ALTITUDE 3997.30 FEET MSL
 28 OCT. 79 0845 HRS PST
 ASCENSION NO. 355

SIGNIFICANT LEVEL DATA
 2510000355
 S M R

GEODETIC COORDINATES
 52.48034 LAT DEG
 106.42307 LON DEG

TABLE 6

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT
379.0	3997.3	7.3	54.0
361.6	4567.0	2.9	52.0
357.0	4943.4	-1.2	24.0
718.0	9616.0	-7.6	32.0
700.0	10302.7	-13.7	18.0
690.6	10667.6	-17.7	15.0
636.6	12849.1	-20.4	16.0
593.4	14701.7	-13.9	40.0
543.4	16978.2	-20.7	34.0
500.0	19095.1	-29.9	19.0
464.2	20961.1	-32.1	20.0
434.2	22616.2	-26.9	46.0
412.4	23874.5	-27.2	59.0
400.0	24612.9	-23.2	59.0
344.2	28175.5	-31.3	70.0
300.0	31333.0	-30.6	68.0
276.8	33134.1	-43.7	55.0
250.0	35355.7	-50.1	
222.0	37826.4	-55.2	
200.0	40070.4	-56.7	
189.0	41247.4	-58.5	
174.8	42370.7	-57.2	
159.0	45024.9	-62.1	
134.0	48301.2	-66.3	
123.6	59012.6	-66.3	
112.4	51707.6	-72.3	
102.6	53567.0	-65.8	
100.0	54101.1	-66.0	
81.0	53367.3	-62.4	
70.0	61291.5	-68.1	
64.0	63670.1	-67.6	
57.5	65232.3	-61.1	
50.0	68100.1	-61.1	
37.0	74300.1	-54.3	
30.0	78319.4	-54.9	
23.4	84096.0	-53.0	

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
210000355
S M R

STATION: ALTITUDE 3997.30 FEET MSL
18 OCT. 79 0845 HRS MST
ASCENSION 10. 355

TABLE 7

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREEES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREEES (T)	SPEED KNOTS	INDEX OF REFRACTION
3997.3	879.0	16.0	54.0	1052.2	604.6	30.0	1.9	1.000281
4000.0	873.9	16.6	53.9	1052.0	604.6	29.0	1.9	1.000280
4500.0	803.4	19.7	34.3	1023.5	667.9	200.0	2.6	1.000263
5000.0	848.3	19.8	24.1	1000.4	607.6	200.0	5.9	1.000249
5500.0	833.1	18.5	25.0	992.7	600.1	203.0	9.4	1.000245
6000.0	818.2	17.2	25.8	979.2	604.0	204.0	13.1	1.000241
6500.0	803.5	15.0	26.7	960.0	603.2	209.1	17.0	1.000237
7000.0	789.1	14.7	27.5	952.9	601.7	208.9	18.6	1.000233
7500.0	775.0	13.4	28.4	940.1	600.2	203.0	19.5	1.000230
8000.0	761.2	12.2	29.2	927.4	600.7	252.0	19.7	1.000226
8500.0	747.5	10.9	30.1	914.9	607.3	249.1	19.5	1.000222
9000.0	734.2	9.7	30.9	902.0	655.6	251.2	18.8	1.000219
9500.0	721.0	8.4	31.8	890.5	654.3	257.7	18.0	1.000215
10000.0	707.9	7.4	24.2	877.7	653.0	254.4	17.5	1.000208
10500.0	694.9	7.0	16.4	863.3	652.4	249.9	17.3	1.000200
11000.0	682.1	6.5	15.2	849.1	651.7	243.0	17.4	1.000196
11500.0	669.5	5.5	15.4	830.3	650.6	233.0	18.7	1.000193
12000.0	657.1	4.5	15.6	823.7	649.4	235.0	20.8	1.000190
12500.0	644.9	3.6	15.8	811.3	648.5	230.5	22.5	1.000187
13000.0	632.0	2.5	18.0	795.3	647.0	238.7	23.9	1.000185
13500.0	621.1	1.1	18.4	783.0	645.5	241.0	25.0	1.000184
14000.0	609.4	-0.2	24.4	770.5	644.0	243.0	25.9	1.000183
14500.0	598.0	-1.6	30.9	760.0	642.4	243.0	26.7	1.000181
15000.0	586.6	-4.0	37.4	750.0	640.9	241.0	27.3	1.000178
15500.0	575.3	-5.2	39.2	733.1	630.0	238.0	28.1	1.000175
16000.0	564.5	-6.4	36.6	722.4	630.5	235.1	29.1	1.000171
16500.0	553.5	-8.4	35.3	711.0	635.1	230.5	30.2	1.000168
17000.0	542.9	-7.6	33.8	700.0	634.1	228.4	31.4	1.000165
17500.0	532.4	-9.4	26.8	688.5	633.1	220.1	32.9	1.000161
18000.0	522.0	-10.0	23.2	677.2	632.2	224.5	34.9	1.000154
18500.0	511.8	-10.8	19.7	660.0	631.2	223.0	36.7	1.000151
19000.0	501.9	-11.6	19.2	650.0	630.2	223.0	38.3	1.000149
19500.0	492.0	-12.5	19.5	644.3	629.1	224.0	38.5	1.000146
20000.0	482.3	-13.3	19.8	633.7	628.1	227.1	37.7	1.000144
20500.0	472.8	-14.2	20.6	623.5	627.0	231.0	37.5	1.000141
21000.0	463.5	-15.4	28.5	613.7	625.5	230.1	37.8	1.000140
21500.0	454.2	-16.7	28.3	604.5	624.1	239.2	38.3	1.000138
22000.0	445.1	-17.9	44.2	595.1	622.0	241.9	39.4	1.000136
22500.0	436.2	-19.2	50.0	585.9	621.0	243.0	40.7	1.000134
23000.0	427.4	-19.2						

UPPER AIR DATA
2910000333
S M R

STATION ALTITUDE 3997.30 FEET MSL
18 OCT. 79 0845 HRS MST
ASCENSION NO. 335

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GN/CUBIC METER	SOUND SPEED M/SEC	DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	410.8	-20.4	55.1	577.0	619.5	244.5	41.9	1.000132
24000.0	410.3	-21.7	59.0	550.1	617.9	244.7	43.1	1.000130
24500.0	401.9	-22.9	59.0	559.2	610.4	243.9	44.0	1.000128
25000.0	393.5	-24.1	60.2	550.1	613.0	242.5	44.7	1.000126
25500.0	385.3	-25.2	61.7	541.1	613.0	241.4	46.0	1.000124
26000.0	377.3	-26.4	63.3	532.3	612.2	240.5	47.7	1.000121
26500.0	369.4	-27.5	64.8	523.0	610.7	239.7	49.1	1.000119
27000.0	361.7	-28.6	66.4	515.1	609.3	238.9	50.3	1.000117
27500.0	354.1	-29.8	67.9	506.7	607.9	238.0	51.0	1.000115
28000.0	346.8	-30.9	69.5	498.5	606.5	238.6	51.4	1.000113
28500.0	339.4	-32.1	69.8	490.2	605.0	239.0	52.1	1.000111
29000.0	332.1	-33.2	69.5	482.0	603.5	240.0	53.1	1.000109
29500.0	324.9	-34.4	69.2	473.9	602.1	241.0	54.0	1.000107
30000.0	317.9	-35.5	68.8	465.0	600.0	242.1	54.9	1.000105
30500.0	311.1	-36.7	68.5	456.2	599.1	243.3	55.5	1.000103
31000.0	304.4	-37.8	68.2	450.5	597.7	244.3	54.6	1.000101
31500.0	297.8	-39.1	66.8	443.1	595.1	245.3	53.8	1.000100
32000.0	291.2	-40.5	63.2	435.9	594.3	245.7	54.0	1.600098
32500.0	284.8	-41.9	59.6	428.9	592.5	246.0	54.2	1.000096
33000.0	278.5	-43.3	56.0	422.0	590.6	246.2	55.4	1.000095
33500.0	272.2	-44.8	45.9**	415.1	588.8	246.2	56.5	1.000093
34000.0	266.0	-46.2	35.0**	408.3	586.9	246.1	55.8	1.000091
34500.0	260.0	-47.6	21.2**	401.6	585.0	245.9	54.9	1.000090
35000.0	254.1	-49.1	8.6**	395.1	583.2	246.0	55.7	1.000088
35500.0	248.3	-50.4		388.3	581.4	247.4	56.5	1.000087
36000.0	242.6	-51.4		381.1	580.1	247.3	58.5	1.000085
36500.0	236.9	-52.5		374.0	578.7	247.2	60.6	1.000083
37000.0	231.4	-53.5		367.0	577.4	246.2	62.0	1.000082
37500.0	226.0	-54.5		360.2	576.0	245.0	63.2	1.000080
38000.0	220.8	-55.3		353.0	575.0	243.9	64.7	1.000079
38500.0	215.6	-55.7		345.3	574.5	243.0	66.5	1.000077
39000.0	210.5	-56.0		337.9	574.1	242.2	68.3	1.000075
39500.0	205.3	-56.3		330.2	573.7	241.4	70.0	1.000074
40000.0	200.7	-56.7		322.9	573.2	241.0	71.5	1.000072
40500.0	195.9	-57.4		316.3	572.5	241.3	72.5	1.000070
41000.0	191.3	-58.1		309.9	571.3	241.6	73.3	1.000069
41500.0	186.7	-58.3		302.7	571.0	242.7	73.4	1.000067
42000.0	182.3	-57.9		295.0	571.0	243.7	73.6	1.000066
42500.0	177.9	-57.5		287.5	572.1	244.5	72.2	1.000064
43000.0	173.7	-57.4		280.5	572.2	245.3	70.2	1.000062

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

GEOMETRIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
2910000355
5 M R

STATION ALTITUDE 3997.30 FEET MSL
18 OCT. 79
0845 IRS INST
ASCENSION NO. 355

TABLE 7 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND SPEED M/S	"INC DATA DIRECTION" DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
4350.0	109.5	-58.2		274.7	571.2	246.0	67.9	1.000061
4400.0	109.5	-59.0		269.1	570.2	246.2	64.3	1.000060
4450.0	101.5	-59.7		263.0	569.1	240.5	60.7	1.000059
4500.0	157.6	-60.5		250.3	569.1	240.2	58.2	1.000058
4550.0	153.9	-61.3		253.0	567.1	245.0	55.8	1.000056
4600.0	150.2	-62.1		247.0	566.0	243.0	54.9	1.000055
4650.0	140.5	-63.0		242.0	564.8	245.7	55.0	1.000054
4700.0	142.9	-63.9		237.9	563.5	245.9	54.9	1.000053
4750.0	139.4	-64.8		233.1	562.3	240.0	54.4	1.000052
4800.0	130.0	-65.7		220.5	561.1	247.4	54.0	1.000051
4850.0	132.7	-66.3		223.4	560.3	243.3	51.9	1.000050
4900.0	129.4	-66.3		217.9	560.3	243.0	49.5	1.000049
4950.0	120.2	-66.3		212.5	560.3	250.4	47.3	1.000047
5000.0	123.1	-66.3		207.3	560.3	251.4	45.8	1.000046
5050.0	120.0	-67.9		203.7	560.1	252.0	44.2	1.000045
5100.0	117.0	-69.6		206.3	562.0	253.4	44.4	1.000045
5150.0	114.1	-71.3		190.9	563.5	254.3	44.6	1.000044
5200.0	111.2	-71.5		192.1	563.2	255.3	44.7	1.000043
5250.0	109.4	-69.7		185.7	563.0	250.4	44.7	1.000041
5300.0	105.7	-67.9		179.4	563.1	257.0	44.5	1.000040
5350.0	103.1	-60.1		173.4	560.0	253.7	43.8	1.000039
5400.0	100.5	-60.0		163.0	560.0	259.9	43.1	1.000038
5450.0	93.6	-65.7		154.0	561.2	260.1	41.9	1.000037
5500.0	93.6	-65.2		160.3	561.7	260.4	40.6	1.000036
5550.0	93.3	-64.6		150.0	562.3	259.0	38.2	1.000035
5600.0	91.0	-64.4		151.9	562.9	258.7	35.6	1.000034
5650.0	88.8	-64.0		147.9	563.4	257.0	32.6	1.000033
5700.0	80.0	-63.5		144.0	564.0	250.2	28.9	1.000032
5750.0	84.5	-63.1		140.2	564.0	254.4	25.2	1.000031
5800.0	82.4	-62.7		130.5	565.2	251.4	21.2	1.000030
5850.0	80.4	-62.7		133.1	565.2	243.2	17.2	1.000030
5900.0	70.5	-63.6		130.5	563.9	240.0	14.4	1.000029
5950.0	70.5	-64.0		127.0	562.6	229.9	12.0	1.000028
6000.0	74.6	-65.0		125.3	561.3	220.1	11.1	1.000028
6050.0	72.3	-66.0		122.8	559.9	213.0	11.2	1.000027
6100.0	71.0	-67.5		120.3	556.0	213.0	11.4	1.000027
6150.0	69.3	-68.1		117.7	557.9	213.2	12.7	1.000026
6200.0	67.5	-68.0		114.7	550.0	223.5	10.5	1.000026
6250.0	63.9	-67.9		111.0	550.1	252.4	16.4	1.000025
6300.0	64.2	-67.3		109.0	550.3	239.0	18.4	1.000024

STATION ALTITUDE 5997.30 FEET MSL
 18 OCT. 79 0845 HRS MST
 ASSEMBLY NO. 303

UPPER AIR DATA
 2910000000
 5 M R
 TABLE 7 (CONT)

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT DEGREES	RELAT. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED KNOTS	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
6350.0	62.7	-66.5			105.6	500.1	245.4	20.7	1.000024
6400.0	61.1	-64.9			102.2	502.2	249.0	20.6	1.000023
6450.0	59.6	-63.4			99.0	504.0	254.0	20.3	1.000022
6500.0	58.2	-61.8			95.9	506.0	257.9	19.0	1.000021
6550.0	56.8	-61.1			93.2	507.3	260.7	16.8	1.000021
6600.0	55.4	-61.1			91.0	507.3	264.2	14.6	1.000020
6650.0	54.1	-61.1			88.6	507.3	265.0	12.9	1.000020
6700.0	52.8	-61.1			86.7	507.3	266.0	11.1	1.000019
6750.0	51.5	-61.1			84.6	507.3	266.1	9.6	1.000019
6800.0	50.2	-61.1			82.5	507.3	266.1	8.3	1.000018
6850.0	49.1	-60.7			80.4	507.9	269.0	7.1	1.000018
6900.0	47.9	-60.1			78.0	508.0	269.0	6.9	1.000017
6950.0	46.8	-59.0			76.1	509.3	261.7	6.7	1.000017
7000.0	45.6	-59.0			74.5	510.0	267.1	7.3	1.000017
7050.0	44.6	-58.5			72.0	510.8	274.0	8.7	1.000016
7100.0	43.5	-58.0			70.4	511.0	279.9	10.3	1.000016
7150.0	42.5	-57.4			68.0	512.2	280.0	11.9	1.000015
7200.0	41.5	-56.9			66.0	512.9	280.4	13.6	1.000015
7250.0	40.5	-56.3			65.1	513.0	280.2	14.9	1.000014
7300.0	39.5	-55.0			63.4	514.4	281.2	15.4	1.000014
7350.0	38.6	-55.3			61.7	515.1	276.4	16.1	1.000014
7400.0	37.7	-54.7			60.1	515.8	267.5	16.2	1.000013
7450.0	36.8	-54.3			58.0	516.3	257.1	16.7	1.000013
7500.0	35.9	-54.4			57.2	516.2	247.5	17.7	1.000013
7550.0	35.1	-54.5			55.9	516.1	243.0	19.2	1.000012
7600.0	34.3	-54.5			54.6	516.0	242.0	20.8	1.000012
7650.0	33.5	-54.6			53.4	515.9	240.5	22.5	1.000012
7700.0	32.7	-54.7			52.1	515.9	242.9	23.4	1.000012
7750.0	31.9	-54.7			50.9	515.8	240.2	24.2	1.000011
7800.0	31.2	-54.8			49.7	515.7	249.4	25.1	1.000011
7850.0	30.5	-54.9			48.6	515.6	251.0	23.3	1.000011
7900.0	29.7	-54.8			47.5	515.6	254.0	20.9	1.000011
7950.0	29.1	-54.7			46.3	515.5	253.0	18.5	1.000010
8000.0	28.4	-54.5			45.2	515.1	262.5	14.3	1.000010
8050.0	27.7	-54.5			44.1	515.5	271.0	9.6	1.000010
8100.0	27.1	-54.1			43.1	515.0	294.1	5.6	1.000010
8150.0	26.4	-53.9			42.0	515.0	294.0	4.1	1.000009
8200.0	25.8	-53.8			41.0	516.0	270.0	3.3	1.000009
8250.0	25.2	-53.6			40.0	517.0	251.4	2.9	1.000009
8300.0	24.6	-53.4			39.1	517.5			1.000009

STATION ALTITUDE 3997.30 FLEET MSL
 18 OCT. 79 0845 HRS MST
 ASCENSION NO. 355

UPPER AIR DATA
 2910000000
 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	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TT)	SPEED KNOTS	INDEX OF REFRACTION
3950.0	24.1	-53.2		39.1	577.0			1.000008
3900.0	23.5	-53.0		37.2	576.0			1.000008

STATION ALTITUDE 3997.30 FEET MSL
 18 OCT. 79
 ASCENSION NO. 335

MANDATORY LEVELS
 2910000355
 S M R

GEODETTIC COORDINATES
 32.46034 LAT DEG
 106.42307 LON DEG

TABLE 8

PRESSURE GEOPOTENTIAL MILLIBARS	AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT PERCENT	RELATIVE HUMIDITY PERCENT	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	19.9	-1.2	24.	269.3	5.5
800.0	15.7	-3.3	27.	269.4	17.8
750.0	11.1	-5.0	30.	249.5	19.5
700.0	6.9	-15.7	18.	252.3	17.3
650.0	4.0	-19.7	10.	235.4	21.9
600.0	-1.3	-14.4	10.	243.9	20.5
550.0	-6.6	-19.0	35.	231.7	30.6
500.0	-10.9	-29.9	19.	223.1	33.6
450.0	-16.0	-28.0	52.	237.0	33.0
400.0	-23.2	-28.9	59.	243.6	44.1
350.0	-30.4	-34.2	69.	258.8	51.2
300.0	-38.6	-42.2	68.	245.0	54.1
250.0	-50.1			247.1	50.2
200.0	-56.7			241.0	71.6
175.0	-57.2			245.0	70.9
150.0	-62.1			245.6	54.9
125.0	-66.3			250.7	40.8
100.0	-66.0			259.9	45.0
70.0	-62.9			247.3	10.6
50.0	-63.1			214.0	12.0
40.0	-63.8			252.8	20.3
30.0	-61.1			262.8	6.2
25.0	-56.1			204.2	13.1
20.0	-54.9			253.3	22.0
15.0	-53.5				

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