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19304D GSRS, MISSILE NUMBER 1063, ROUND NUMBER V-67, 29 AUGUST --ETC(U)
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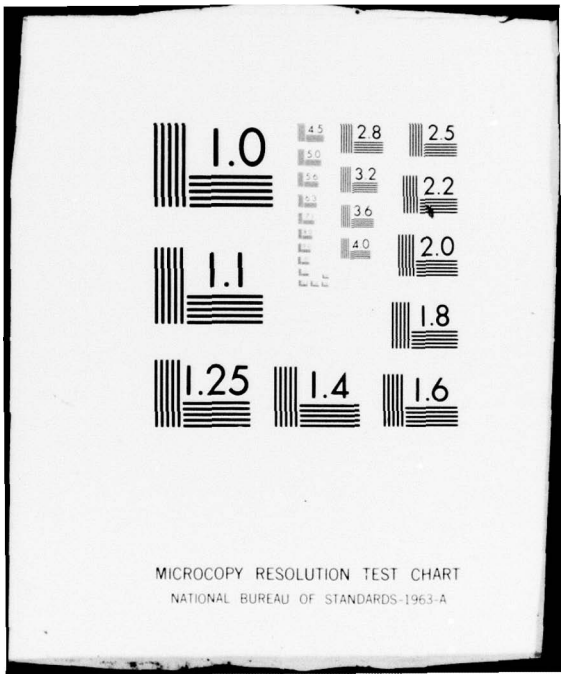
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AUGUST 1979
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LEVEL II

12

METEOROLOGICAL DATA REPORT

19304 D GSRS
Missile No. 1063
Round No. V-67
29 August 1979

by

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

[redacted]

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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1. Ballistics
2. Meteorology
3. Wind

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 19304 D GSRS, Missile NR. 1063, Round Number V-67, are presented in tabular form.

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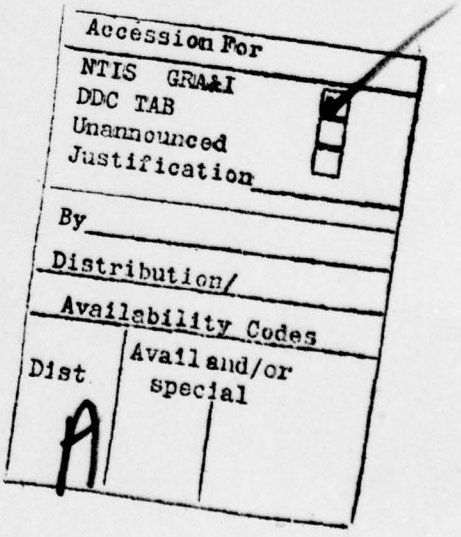
CONTENTS



INTRODUCTION

19304D GSRS , Missile Number 1063 , Round Number V-67 , was launched from LC-33 , White Sands Missile Range (WSMR), New Mexico, at 1100 MDT, 29 August 1979 . The scheduled launch time was 1100 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 (°C), relative humidity, dew point (°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 RAPTS T-9 pibal observation at:

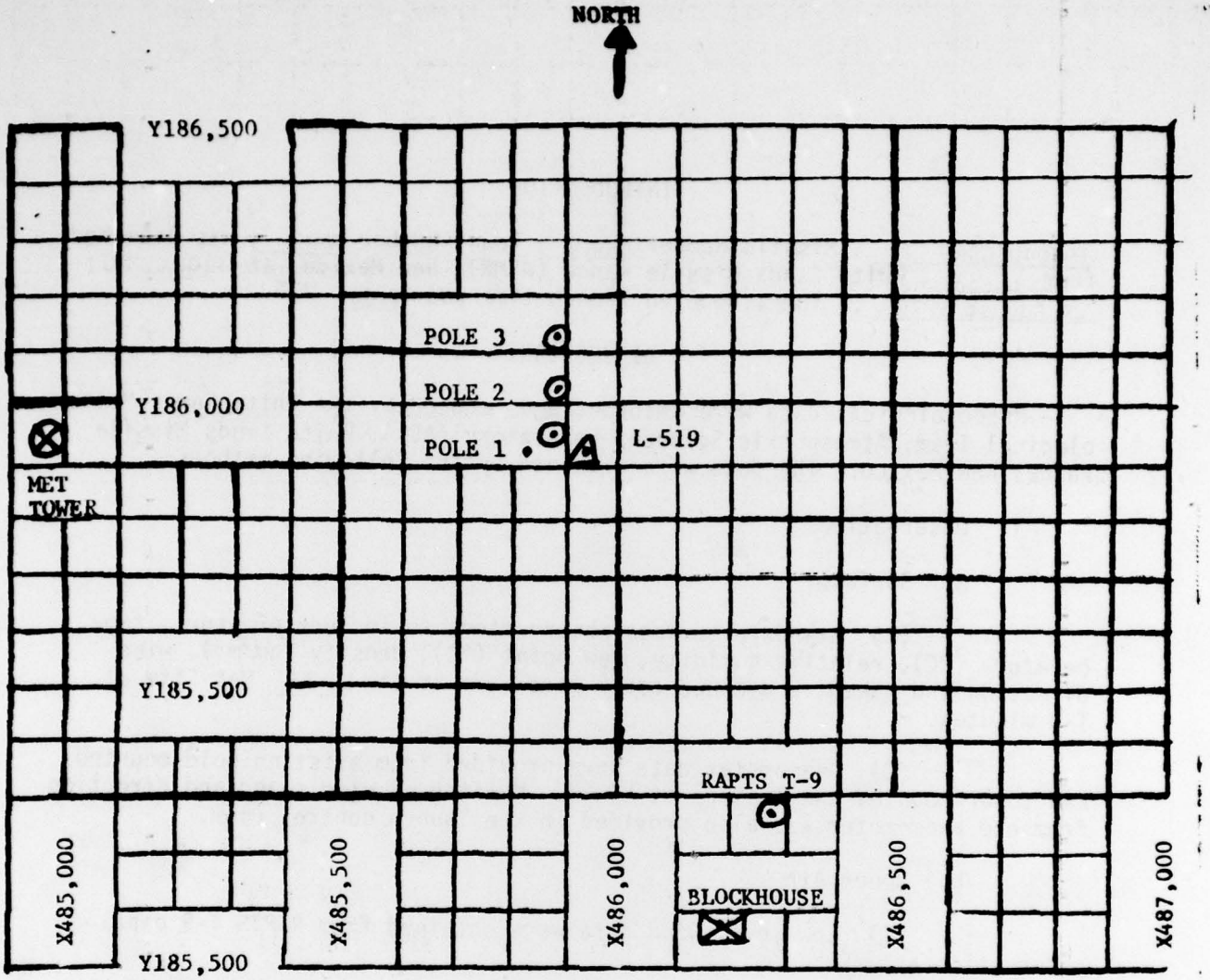
SITE AND ALTITUDE

SMR 2400 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 101,500 feet in 500-feet increments.

SITE AND TIME

SMR 1000 MST



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 1100 MDT, 29 August 1979, at LC-33, 19304D GSRS, Missile Number 1063, Round Number V-67.

ELEVATION	3,977.30	FT/MSL
PRESSURE	877.7	MBS
TEMPERATURE	27.0	°C
RELATIVE HUMIDITY	39	%
DEW POINT	11.8	°C
DENSITY	1,011	GM/M^3
WIND SPEED	01	MPH
WIND DIRECTION	310	DEGREES
CLOUD COVER	1	Cu
CLOUD COVER	2	Ci

TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	M	5.0	-30	003	2.0	-30	008	7.0
-20	M	4.0	-20	352	3.0	-20	005	5.0
-10	M	4.0	-10	335	3.0	-10	346	4.0
0.0	M	4.0	0.0	357	2.0	0.0	321	6.0
+10	M	4.0	+10	360	3.0	+10	328	5.0

Type 19304D GSRS, Missile No. 1063, Round No. V-67 launched from LC-33 on 29 August 1979 at 1100 MDT.

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

NOTE: WIND DIRECTIONS ARE REFERENCED TRUE NORTH.

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

LEVEL #1 12 ft.			LEVEL #2 62 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	357	5.0	-30	332	5.0
-20	347	5.0	-20	337	6.0
-10	338	5.0	-10	344	6.0
0.0	351	4.0	0.0	340	4.0
+10	356	4.0	+10	340	4.0
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	352	6.0	-30	347	5.5
-20	347	6.0	-20	347	5.5
-10	352	5.5	-10	346	5.5
0.0	350	4.5	0.0	345	5.0
+10	354	4.0	+10	335	5.0

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19304D GSRS, Missile No. 1063, Round No. V-67 launched from LC-33 on 29 August 1979 at 1100 MDT.

NOTE: WIND DIRECTIONS ARE REFERENCED TRUE NORTH.

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-33 DATE 29 August 1979 TIME 1107 MDT

RELEASE POINT COORDINATES (WSTM) X=486,037.24 Y=182.350.16 H=3,977.3

MISSILE TYPE 19304 D GSRS MISSILE NO. 1063 ROUND NO. V-67

MISSILE LAUNCHED FROM LC-33 DATE 29 AUGUST 1979 TIME 1100 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TRUE NORTH.

HEIGHTS - METERS AGL.

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
SFC	310	01.0
60	310	01.0
120	324	03.0
180	326	05.0
240	327	07.5
300	350	09.0
360	006	12.0
420	013	14.0
480	009	11.0
540	002	08.0
600	357	06.0
660	355	05.5
720	353	04.5
780	352	03.0
840	349	01.5

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
900	359	00.5
960	083	00.5
1020	106	01.0
1080	101	01.5
1140	092	01.5
1200	085	01.5
1260	079	01.5
1320	073	01.5
1380	054	01.0
1440	032	01.5
1500	040	03.0
1560	052	08.0
1620	055	13.0
1680	053	10.5
1740	046	06.5

RELEASED FROM LC-33 DATE 29 AUGUST 1979 TIME 1107 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
1800	021	03.0
1860	289	02.5
1920	261	06.0
1980	312	02.0
2040	050	05.0
2100	052	07.5
2160	052	08.5
2220	052	08.5
2280	049	08.0
2340	046	07.5
2400	044	07.0

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH

DELAS-MS-MT-WS Form 46
1 Sept 1979

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
ASCENSION NO. 284

SIGNIFICANT LEVEL DATA
2410060284
S M R
TABLE 5

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
877.0	3997.3	28.0	6.7	26.0
850.0	4900.3	23.6	6.4	33.0
773.0	7606.5	20.4	.3	26.0
744.4	8670.7	18.2	-.1	29.0
700.0	10386.3	13.6	-2.3	33.0
679.6	11201.6	11.5	-5.4	30.0
617.0	13822.8	4.4	-5.1	50.0
549.2	16894.5	-3.9	-8.5	70.0
532.0	17718.0	-6.0	-12.3	61.0
522.4	18186.8	-6.7	-11.4	69.0
516.8	18463.8	-6.7	-18.0	40.0
508.8	18864.2	-7.3	-13.5	61.0
500.0	19311.1	-7.9	-16.0	52.0
485.2	20078.8	-8.5	-24.5	26.0
462.2	21311.2	-11.4	-18.8	54.0
447.2	22142.5	-12.4	-20.9	49.0
400.0	24915.2	-18.4	-26.0	51.0
379.9	26174.5	-21.4	-26.2	65.0
362.2	27329.6	-22.9	-30.6	48.0
329.6	29579.9	-28.6	-45.4	18.0
303.0	31545.1	-33.4	-37.4	07.0
300.0	31775.0	-33.8	-39.3	57.0
289.2	32622.2	-33.4	-49.0	19.0
275.0	33782.2	-35.2		
250.0	35944.7	-40.7		
200.0	40824.1	-52.4		
173.4	43813.8	-59.9		
164.6	44885.0	-60.4		
150.0	46778.5	-63.7		
125.6	50321.4	-69.4		
115.0	52056.8	-69.5		
111.6	52649.8	-67.8		
105.0	53849.2	-71.3		
100.0	54801.8	-71.0		
89.8	56911.3	-69.6		
70.0	61924.8	-60.4		
50.0	68891.3	-57.9		
39.6	73774.2	-55.8		
30.0	79698.1	-49.9		
24.4	84167.9	-49.9		

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
ASCENSION NO. 284

SIGNIFICANT LEVEL DATA
2410060284
S M R
TABLE 5 (CONT)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT	REL.HUM. PERCENT
20.0	88514.1	-45.5		
15.6	94018.1	-44.0		
11.0	101905.0	-37.1		

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
ASCENSION NO. 284

UPPER AIR DATA
2410060264
S M R

TABLE 6

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	877.0	28.0	6.7	26.0	1010.2	677.5	60.0	8.0	1.000266
4000.0	876.9	28.0	6.7	26.0	1010.1	677.5	60.0	8.0	1.000266
4500.0	861.9	25.6	6.7	29.9	1000.8	674.8	51.7	6.3	1.000265
5000.0	847.0	23.5	6.2	32.7	990.5	672.4	37.8	4.8	1.000262
5500.0	832.3	22.9	5.1	31.4	975.5	671.6	14.4	3.8	1.000255
6000.0	817.8	22.3	4.0	30.2	960.7	670.9	13.5	2.9	1.000249
6500.0	803.6	21.7	2.8	28.9	946.1	670.1	16.7	2.0	1.000244
7000.0	789.6	21.1	1.7	27.6	931.7	669.4	358.4	1.5	1.000238
7500.0	775.9	20.5	.5	26.3	917.5	668.7	337.9	1.4	1.000232
8000.0	762.3	19.6	.2	27.1	904.4	667.6	328.5	1.7	1.000229
8500.0	748.9	18.6	-.0	28.5	891.6	666.4	358.7	2.0	1.000226
9000.0	735.7	17.3	-.5	29.8	879.6	665.0	23.5	2.9	1.000222
9500.0	722.6	16.0	-1.1	30.9	868.1	663.4	28.0	4.4	1.000219
10000.0	709.8	14.6	-1.8	32.1	856.7	661.8	27.9	5.3	1.000215
10500.0	697.1	13.3	-2.8	32.6	845.5	660.3	25.6	5.7	1.000211
11000.0	684.6	12.0	-4.7	30.7	834.3	658.7	32.7	5.7	1.000206
11500.0	672.2	10.7	-5.2	32.3	823.0	657.1	45.0	5.5	1.000203
12000.0	659.9	9.3	-4.9	36.1	811.8	655.6	60.1	5.9	1.000201
12500.0	647.8	8.0	-4.8	39.9	800.8	654.0	73.0	6.6	1.000199
13000.0	636.0	6.6	-4.8	43.7	789.9	652.5	89.1	7.3	1.000197
13500.0	624.4	5.3	-5.0	47.5	779.2	650.9	101.9	8.5	1.000194
14000.0	612.9	3.9	-5.2	51.2	768.6	649.3	112.0	10.4	1.000192
14500.0	601.4	2.6	-5.7	54.4	757.9	647.7	118.4	12.1	1.000189
15000.0	590.1	1.2	-6.2	57.7	747.4	646.1	122.5	13.4	1.000186
15500.0	579.0	-.1	-6.7	60.9	737.0	644.5	126.7	14.1	1.000183
16000.0	568.1	-1.5	-7.4	64.2	726.8	642.9	131.7	14.4	1.000180
16500.0	557.5	-2.8	-8.0	67.4	716.8	641.2	134.6	13.8	1.000177
17000.0	547.0	-4.2	-9.0	68.8	706.9	639.6	137.0	12.9	1.000174
17500.0	536.5	-5.4	-11.3	63.4	696.9	638.0	143.9	11.2	1.000169
18000.0	526.2	-6.4	-11.7	65.8	686.0	636.8	154.1	9.9	1.000166
18500.0	516.1	-6.8	-17.5	41.9	674.1	636.2	168.7	10.2	1.000158
19000.0	506.1	-7.5	-14.2	58.3	662.6	635.5	177.6	11.0	1.000159
19500.0	496.3	-8.0	-17.7	45.6	651.4	634.7	179.2	11.7	1.000153
20000.0	486.7	-8.4	-23.4	28.7	640.0	634.1	178.9	11.7	1.000148
20500.0	477.2	-9.5	-21.9	35.6	630.0	632.8	177.1	11.3	1.000146
21000.0	467.9	-10.7	-19.8	46.9	620.4	631.5	177.2	11.2	1.000145
21500.0	458.7	-11.6	-19.3	52.9	610.4	630.4	177.7	11.2	1.000143
22000.0	449.7	-12.2	-20.5	49.9	599.9	629.0	177.2	11.8	1.000140
22500.0	440.8	-13.2	-21.5	49.3	590.1	628.4	177.5	12.3	1.000138
23000.0	432.0	-14.3	-22.5	49.6	580.8	627.1	179.9	12.2	1.000135

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
ASCENSION NO. 284

UPPER AIR DATA
2410060284
S M R

TABLE 6 (CONT)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	423.4	-15.3	-23.4	50.0	571.7	625.8	184.1	12.3	1.000133
24000.0	415.0	-16.4	-24.3	50.3	562.7	624.5	190.7	12.8	1.000130
24500.0	406.7	-17.5	-25.2	50.7	553.8	623.1	197.6	13.7	1.000128
25000.0	398.6	-18.6	-26.0	51.9	545.2	621.8	203.9	15.2	1.000126
25500.0	390.5	-19.8	-26.0	57.5	536.6	620.3	209.5	16.4	1.000124
26000.0	382.6	-21.0	-26.1	63.1	528.2	618.9	214.4	17.5	1.000122
26500.0	374.8	-21.8	-27.4	60.2	519.2	617.8	216.1	16.9	1.000119
27000.0	367.2	-22.5	-29.4	52.9	510.0	617.0	216.8	15.5	1.000117
27500.0	359.6	-23.3	-31.7	45.7	501.3	615.9	216.5	13.9	1.000114
28000.0	352.2	-24.6	-34.5	39.1	493.4	614.3	215.9	12.2	1.000112
28500.0	344.9	-25.9	-37.5	32.4	485.7	612.7	220.7	13.0	1.000110
29000.0	337.7	-27.1	-40.8	25.7	478.1	611.1	225.3	14.2	1.000108
29500.0	330.7	-28.4	-44.7	19.1	470.6	609.5	230.0	16.5	1.000106
30000.0	323.7	-29.6	-42.1	28.5	463.0	608.0	233.1	18.9	1.000104
30500.0	316.9	-30.8	-39.7	40.9	455.5	606.5	232.5	20.7	1.000103
31000.0	310.2	-32.1	-38.3	53.4	448.1	605.0	232.6	22.6	1.000101
31500.0	303.6	-33.3	-37.4	65.9	440.8	603.4	235.6	25.2	1.000100
32000.0	297.1	-33.7	-41.1	46.9	432.1	602.9	238.7	28.6	1.000097
32500.0	290.7	-33.5	-46.8	24.5	422.5	603.2	243.0	34.1	1.000095
33000.0	284.5	-34.0	-52.8	12.8**	414.4	602.5	245.3	39.5	1.000093
33500.0	278.4	-34.8	-61.5	4.6**	406.8	601.5	245.9	44.3	1.000091
34000.0	272.4	-35.8			399.7	600.2	246.3	48.6	1.000089
34500.0	266.4	-37.0			393.1	598.6	246.4	52.1	1.000088
35000.0	260.6	-38.3			386.6	597.0	247.3	54.1	1.000086
35500.0	254.9	-39.6			380.2	595.4	248.9	54.9	1.000085
36000.0	249.4	-40.8			373.9	593.8	250.4	54.6	1.000083
36500.0	243.7	-42.0			367.4	592.3	251.9	53.6	1.000082
37000.0	238.2	-43.2			360.9	590.7	253.5	54.2	1.000080
37500.0	232.8	-44.4			354.6	589.2	255.0	55.3	1.000079
38000.0	227.6	-45.6			348.4	587.6	253.9	56.1	1.000078
38500.0	222.4	-46.8			342.4	586.1	252.2	56.8	1.000076
39000.0	217.4	-48.0			336.4	584.5	249.6	56.9	1.000075
39500.0	212.5	-49.2			330.6	583.0	247.2	57.0	1.000074
40000.0	207.7	-50.4			324.8	581.4	247.2	55.9	1.000072
40500.0	203.0	-51.6			319.2	579.8	249.3	53.9	1.000071
41000.0	198.3	-52.8			313.6	578.2	250.0	53.5	1.000070
41500.0	193.7	-54.1			308.0	576.6	249.3	54.4	1.000069
42000.0	189.1	-55.3			302.4	574.9	249.0	53.6	1.000067
42500.0	184.6	-56.6			297.0	573.3	249.1	51.4	1.000066
43000.0	180.3	-57.9			291.7	571.6	249.3	48.4	1.000065

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

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
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UPPER AIR DATA
24100o0284
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TABLE 6 (CONT)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
43500.0	176.0	-59.1			286.5	570.0	249.8	44.2	1.000064
44000.0	171.8	-60.0			280.8	568.8	250.2	40.2	1.000063
44500.0	167.7	-60.2			274.4	568.5	246.2	38.6	1.000061
45000.0	163.7	-60.6			268.3	568.0	241.9	37.2	1.000060
45500.0	159.7	-61.5			262.8	566.8	238.2	35.5	1.000059
46000.0	155.8	-62.3			257.5	565.6	234.4	33.8	1.000057
46500.0	152.1	-63.2			252.3	564.5	232.7	31.9	1.000056
47000.0	148.3	-64.1			247.2	563.3	232.9	29.9	1.000055
47500.0	144.7	-64.9			242.0	562.2	234.1	27.8	1.000054
48000.0	141.1	-65.7			236.9	561.2	237.5	25.9	1.000053
48500.0	137.6	-66.5			231.9	560.1	241.5	24.0	1.000052
49000.0	134.2	-67.3			227.1	559.0	242.3	23.3	1.000051
49500.0	130.9	-68.1			222.3	557.9	243.5	22.6	1.000050
50000.0	127.6	-68.9			217.7	556.8	245.2	20.7	1.000048
50500.0	124.5	-69.4			212.8	556.1	247.5	18.5	1.000047
51000.0	121.3	-69.4			207.5	556.0	248.3	16.4	1.000046
51500.0	118.3	-69.5			202.3	556.0	243.9	14.8	1.000045
52000.0	115.3	-69.5			197.3	556.0	238.4	13.3	1.000044
52500.0	112.4	-68.2			191.2	557.7	230.8	12.4	1.000043
53000.0	109.6	-68.8			186.9	556.9	222.1	12.0	1.000042
53500.0	106.9	-70.3			183.5	554.9	213.5	11.8	1.000041
54000.0	104.2	-71.3			179.8	553.6	211.5	10.5	1.000040
54500.0	101.6	-71.1			175.1	553.8	208.6	9.2	1.000039
55000.0	99.0	-70.9			170.5	554.1	200.3	8.4	1.000038
55500.0	96.5	-70.5			165.9	554.5	188.9	8.0	1.000037
56000.0	94.1	-70.2			161.5	555.0	179.5	8.2	1.000036
56500.0	91.7	-69.9			157.2	555.4	175.5	8.9	1.000035
57000.0	89.4	-69.4			152.9	556.0	171.7	9.6	1.000034
57500.0	87.2	-68.5			148.5	557.3	170.0	10.3	1.000033
58000.0	85.1	-67.6			144.2	558.5	168.6	11.0	1.000032
58500.0	83.0	-66.7			140.0	559.8	170.1	10.4	1.000031
59000.0	80.9	-65.8			136.0	561.0	177.5	8.1	1.000030
59500.0	79.0	-64.8			132.1	562.3	189.9	6.0	1.000029
60000.0	77.0	-63.9			128.3	563.5	222.0	2.5	1.000029
60500.0	75.1	-63.0			124.6	564.7	313.5	3.2	1.000028
61000.0	73.3	-62.1			121.0	566.0	355.4	4.7	1.000027
61500.0	71.5	-61.2			117.5	567.2	34.4	6.9	1.000026
62000.0	69.7	-60.4			114.2	568.3	51.9	10.2	1.000025
62500.0	68.1	-60.2			111.4	568.5	76.1	10.9	1.000025
63000.0	66.5	-60.0			108.6	568.8	94.5	13.3	1.000024

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
ASCENSION NO. 284

UPPER AIR DATA
2410060284
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TABLE 6 (CONT)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
03500.0	64.9	-59.8			105.9	569.0	106.9	15.7	1.000024
04000.0	63.3	-59.7			103.3	569.2	116.5	18.0	1.000023
04500.0	61.8	-59.5			100.8	569.5	123.7	20.8	1.000022
05000.0	60.3	-59.3			98.3	569.7	122.4	20.5	1.000022
05500.0	58.9	-59.1			95.9	569.9	120.5	20.0	1.000021
06000.0	57.5	-58.9			93.5	570.2	118.1	19.5	1.000021
06500.0	56.1	-58.8			91.2	570.4	114.3	18.6	1.000020
07000.0	54.8	-58.6			88.9	570.7	110.2	17.9	1.000020
07500.0	53.5	-58.4			86.7	570.9	108.2	17.5	1.000019
08000.0	52.2	-58.2			84.6	571.1	107.8	17.5	1.000019
08500.0	51.0	-58.0			82.5	571.4	107.5	17.4	1.000018
09000.0	49.7	-57.9			80.5	571.6	104.9	17.0	1.000018
09500.0	48.6	-57.6			78.5	571.9	102.1	16.6	1.000017
10000.0	47.4	-57.4			76.6	572.2	99.6	16.8	1.000017
10500.0	46.3	-57.2			74.7	572.5	97.8	18.0	1.000017
11000.0	45.2	-57.0			72.9	572.8	96.2	19.1	1.000016
11500.0	44.1	-56.8			71.1	573.1	96.1	19.5	1.000016
12000.0	43.1	-56.6			69.3	573.3	96.5	19.6	1.000015
12500.0	42.1	-56.3			67.6	573.6	96.7	19.8	1.000015
13000.0	41.1	-56.1			66.0	573.9	96.3	20.3	1.000015
13500.0	40.1	-55.9			64.3	574.2	96.0	20.8	1.000014
14000.0	39.2	-55.6			62.7	574.6	96.5	21.4	1.000014
14500.0	38.3	-55.1			61.1	575.3	98.1	22.2	1.000014
15000.0	37.4	-54.6			59.6	576.0	99.6	23.1	1.000013
15500.0	36.5	-54.1			58.1	576.6	101.7	23.0	1.000013
16000.0	35.7	-53.6			56.6	577.3	104.7	21.8	1.000013
16500.0	34.9	-53.1			55.2	577.9	107.9	20.7	1.000012
17000.0	34.0	-52.6			53.8	578.6	108.5	19.0	1.000012
17500.0	33.3	-52.1			52.4	579.2	106.9	17.0	1.000012
18000.0	32.5	-51.6			51.1	579.9	104.9	14.9	1.000011
18500.0	31.7	-51.1			49.8	580.5	90.7	15.2	1.000011
19000.0	31.0	-50.6			48.5	581.2	87.8	16.8	1.000011
19500.0	30.3	-50.1			47.3	581.8	80.6	18.8	1.000011
20000.0	29.6	-49.9			46.2	582.1	76.6	20.4	1.000010
20500.0	28.9	-49.9			45.1	582.1	74.0	22.1	1.000010
21000.0	28.2	-49.9			44.1	582.1	71.6	23.8	1.000010
21500.0	27.6	-49.9			43.1	582.1	73.5	24.9	1.000010
22000.0	27.0	-49.9			42.1	582.1	76.5	25.9	1.000009
22500.0	26.4	-49.9			41.1	582.1	79.5	26.9	1.000009
23000.0	25.8	-49.9			40.2	582.1	82.1	28.0	1.000009

STATION ALTITUDE 3997.30 FEET MSL
29 AUG. 79 1000 HRS MST
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UPPER AIR DATA
2410060284
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TABLE 6 (CONT)

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.2	-49.9			39.3	582.1	84.7	29.3	1.000009
84000.0	24.6	-49.9			38.4	582.1	87.1	30.5	1.000009
84500.0	24.0	-49.6			37.4	582.5	88.1	30.2	1.000008
85000.0	23.5	-49.1			36.5	583.2	88.3	28.9	1.000008
85500.0	23.0	-48.6			35.6	583.8	88.6	27.5	1.000008
86000.0	22.4	-48.0			34.7	584.5	88.6	26.7	1.000008
86500.0	21.9	-47.5			33.9	585.2	88.5	26.4	1.000008
87000.0	21.4	-47.0			33.0	585.8	88.5	26.0	1.000007
87500.0	20.9	-46.5			32.2	586.5	89.7	26.7	1.000007
88000.0	20.5	-46.0			31.4	587.1	92.6	28.9	1.000007
88500.0	20.0	-45.5			30.6	587.8	95.1	31.1	1.000007
89000.0	19.6	-45.4			29.9	588.0	97.7	33.2	1.000007
89500.0	19.1	-45.2			29.2	588.1	100.7	34.9	1.000007
90000.0	18.7	-45.1			28.6	588.3	103.3	36.8	1.000006
90500.0	18.3	-45.0			27.9	588.5	105.8	38.5	1.000006
91000.0	17.9	-44.8			27.3	588.7	108.5	37.3	1.000006
91500.0	17.5	-44.7			26.7	588.8	111.4	36.3	1.000006
92000.0	17.1	-44.5			26.0	589.0	114.4	35.4	1.000006
92500.0	16.7	-44.4			25.4	589.2	116.6	35.2	1.000006
93000.0	16.3	-44.3			24.9	589.4	117.4	35.1	1.000006
93500.0	16.0	-44.1			24.3	589.6	118.7	35.0	1.000005
94000.0	15.6	-44.0			23.7	589.7	119.4	34.8	1.000005
94500.0	15.3	-43.6			23.2	590.3	119.7	34.6	1.000005
95000.0	14.9	-43.1			22.6	590.8	119.9	34.3	1.000005
95500.0	14.6	-42.7			22.1	591.4	119.7	33.4	1.000005
96000.0	14.3	-42.3			21.6	592.0	118.4	31.6	1.000005
96500.0	14.0	-41.8			21.0	592.5	117.0	29.7	1.000005
97000.0	13.7	-41.4			20.5	593.1	115.0	28.0	1.000005
97500.0	13.4	-41.0			20.1	593.6	108.6	28.1	1.000004
98000.0	13.1	-40.5			19.6	594.2	102.2	28.5	1.000004
98500.0	12.8	-40.1			19.1	594.8	96.1	29.3	1.000004
99000.0	12.5	-39.6			18.7	595.3	93.4	30.6	1.000004
99500.0	12.2	-39.2			18.2	595.9	91.7	32.1	1.000004
100000.0	12.0	-38.8			17.8	596.4	90.2	33.6	1.000004
100500.0	11.7	-38.3			17.4	597.0			1.000004
101000.0	11.4	-37.9			17.0	597.5			1.000004
101500.0	11.2	-37.5			16.6	598.1			1.000004

STATION ALTITUDE 3997.30 FEET MSL
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MANDATORY LEVELS
2410060284
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GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 7

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4897.	23.6	6.4	33.	41.3	5.0
800.0	6626.	21.6	2.6	29.	13.0	1.8
750.0	8452.	18.6	-.0	28.	355.4	1.9
700.0	10376.	13.6	-2.3	33.	26.1	5.6
650.0	12404.	8.2	-4.8	39.	71.0	6.5
600.0	14551.	2.4	-5.7	55.	118.9	12.3
550.0	16835.	-3.8	-8.5	70.	136.2	13.2
500.0	19284.	-7.9	-16.0	52.	178.7	11.4
450.0	21952.	-12.2	-20.5	50.	177.3	11.8
400.0	24873.	-18.4	-26.0	51.	202.8	14.9
350.0	28101.	-25.0	-35.3	37.	216.8	12.2
300.0	31711.	-33.8	-39.3	57.	236.8	26.5
250.0	35865.	-40.7			250.1	54.7
200.0	40724.	-52.4			250.3	53.1
175.0	43512.	-59.4			249.9	43.4
150.0	46651.	-63.7			232.8	30.9
125.0	50269.	-69.4			246.9	19.0
100.0	54631.	-71.0			205.0	8.6
80.0	59013.	-65.3			181.0	7.3
70.0	61711.	-60.4			48.2	9.7
60.0	64871.	-59.3			122.1	20.5
50.0	68631.	-57.9			105.7	17.1
40.0	73260.	-55.9			96.0	20.8
30.0	79356.	-49.9			78.9	19.4
25.0	83267.	-49.9			85.2	29.5
20.0	88096.	-45.5			95.0	30.9
15.0	94415.	-43.2			119.8	34.4