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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 8/2
193040 MLRS, MISSILE NUMBERS BN-047, V01-015, V01-014, BK-004, --ETC(U)
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DR 1220

JANUARY 1982

METEOROLOGICAL DATA REPORT
19304D MLRS
Missile Number BN-047, V01-015, V01-014,
BK-004, V01-010 Thru 013
Round Numbers V-205/MD-59 Thru V-211/MD-65
28 Jan 82

by

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AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1220	2. GOVT ACCESSION NO. A11 9 <	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 19304D MLRS, Missile Numbers BN-047, V01-015, V01-014, BK-004, V01-010 Thru 013, Round Numbers V-205/MD-59 Thru V-211/MD-65		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s) ASL White Sands Meteorological Team		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS		8. CONTRACT OR GRANT NUMBER(s) DA TASK 1F665702D127-02
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
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783		12. REPORT DATE Jan 82
		13. NUMBER OF PAGES 28
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
16. DISTRIBUTION STATEMENT (of this Report)		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
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 19304D MLRS, Missile No. BN-047, V01-015, V01-014, BK-004, V01-010 Thru 013, Round Numbers V-205/MD-59 Thru V-211/MD-65 presented in tabular form.		

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INTRODUCTION

19304D MLRS, Missile Numbers BN-047, V01-015, V01-014, BK-004, V01-010, V01-011, V01-012, and V01-013, Round Numbers V-205/MD-59, V-206/MD-60, V-207/MD-61, V-208/MD-62, V-209/MD-63, V-210/MD-64, V-211/MD-65, and V-212/MD-66, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0900:01, 0900:06, 0900:11, 0900:15, 0900:20, 0900:24, 0900:29, and 0900:33 MST, 28 Jan 1982. The scheduled launch times were 0900, 0900:04.5, 0900:09, 0900:13.5, 0900:18, 0900:22.5, 0900:27, and 0900:31.5 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 LC33 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 pilot-balloon observations at:

SITE AND ALTITUDE

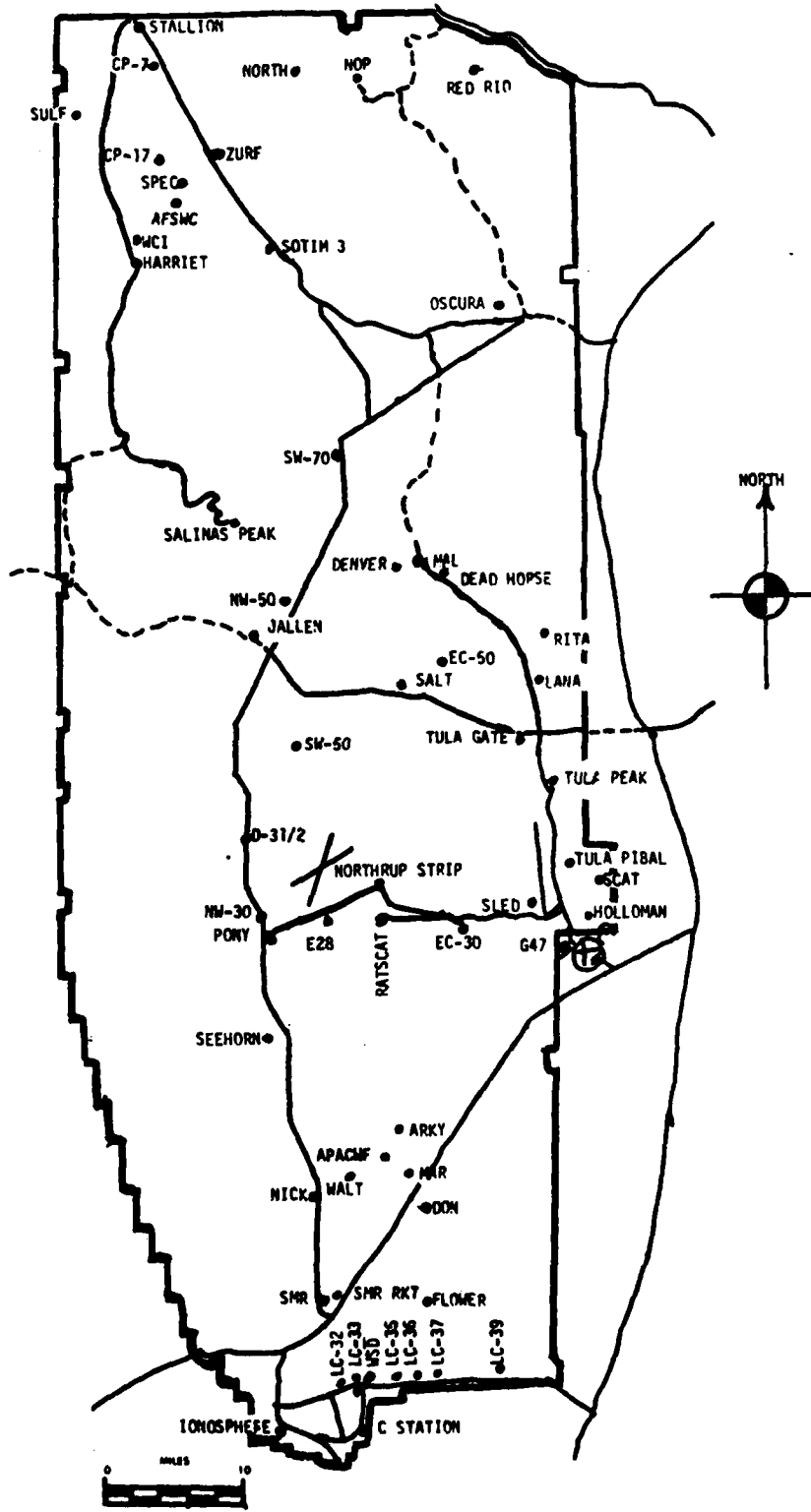
WSD	2 Km
NICK	2 Km

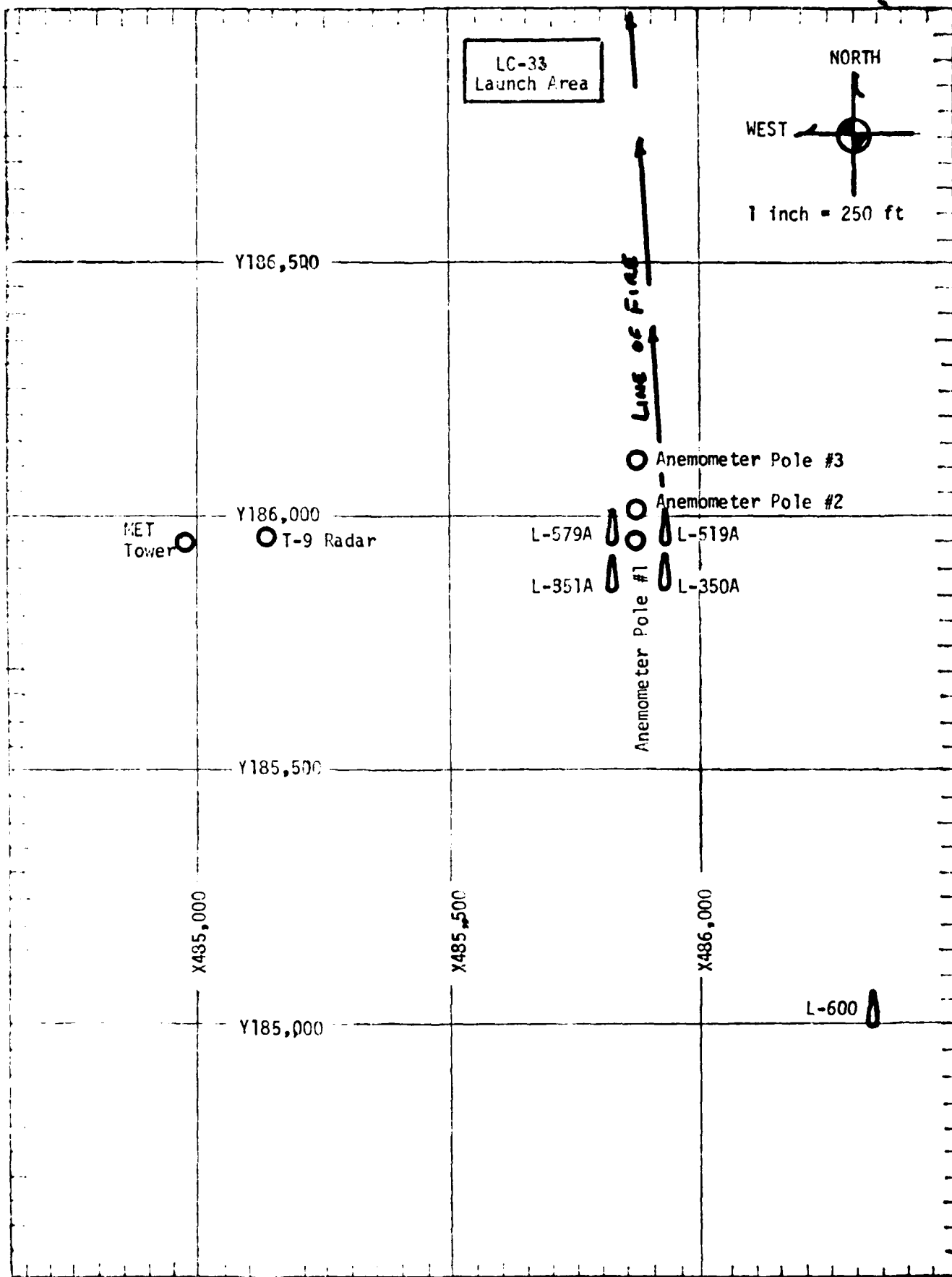
(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

LC 37	0600 MST
WSD	0700 MST
WSD	0900 MST

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1		STATION LC-33 E and A															
DATE 28 Jan 82		DAY MONTH YEAR		PRESSURE mbs		TEMPERATURE OF °C		DEW POINT OF °C		RELATIVE HUMIDITY %		DENSITY gm/m ³		WIND		VISIBILITY	
TIME M S I																	
0900		882.6		5.6		-2.4		56		1101		CALM		50			

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	HGT	AMT	HGT	AMT	HGT	
1/10 AC 12,000	2/10 AS	15,000	1/10 CI	25,000			

PSYCHROMETRIC COMPUTATION

TIME: MST	0900	
DRY BULB TEMP.	5.6	
WET BULB TEMP.	2.1	
WET BULB DEPR.	3.5	
DEW POINT	-2.4	
RELATIVE HUMID.	56	

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		CALM	-30		CALM	-30		CALM
-20		CALM	-20		CALM	-20		CALM
-10		CALM	-10		CALM	-10		CALM
0.0		CALM	0.0		CALM	0.0		CALM
+10		CALM	+10		CALM	+10		CALM

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		CALM	-30	109	01
-20		CALM	-20	109	01
-10		CALM	-10	109	01
0.0		CALM	0.0		CALM
+10		CALM	+10		CALM

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		CALM	-30		CALM
-20		CALM	-20		CALM
-10		CALM	-10		CALM
0.0		CALM	0.0		CALM
+10		CALM	+10		CALM

TABLE 4

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 28 Jan 1982

SITE: WSD

TIME: 0900 MST

WSTN COORDINATES:

X= 488,580.0

Y= 185,045.0

H= 3,989.5

SITE: NICK

TIME: 0900 MST

WSTN COORDINATES:

X= 470,734.56

Y= 255,775.64

H= 4,126.57

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE		CALM
150	169	08
210	164	12
270	170	13
330	168	12
390	179	12
500	169	13
650	179	17
800	172	17
950	180	17
1150	183	13
1350	190	16
1550	205	17
1750	223	21
2000	229	26

Data obtained from
Nike-Herc tracked
Pilot-balloon observations

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE		CALM
150	163	09
210	166	12
270	170	14
330	173	16
390	175	16
500	175	17
650	172	18
800	175	16
950	195	13
1150	221	14
1350	231	18
1550	231	20
1750	236	21
2000	241	23

Data obtained from
Single-Theodolite tracked
Pilot-balloon observations

TABLE 5

AIMING AND T-TIME COMPUTER MET MESSAGES

28 January 1982

LC37 0600 MST

METCM1324063

281300124881

00000000 27310881

01387008 27990870

02325015 28470844

03339014 28310805

04371012 27890757

05339017 27550712

06391023 27250669

07407030 26960629

08411031 26700590

09450040 26460553

WSD 0700 MST

METCM1324064

281400122881

00213006 27330881

01292005 28000871

02333014 28510845

03313011 28400805

04357012 28020757

05411018 27640713

06419024 27320670

07427027 27010629

08446031 26710591

09450041 26440554

WSD 0900 MST

METCM1324064

281600122882

00000000 27770882

01303007 28100372

02303013 28480846

03315016 28400806

04355016 28110759

05398024 27750714

06420025 27400671

07433031 27180631

08456036 27040592

09446040 26710556

STATION ALTITUDE 4051.37 FEET MSL
28 JAN. 82 0600 HRS MST
ASCENSION NO. 1

SIGNIFICANT LEVEL DATA
0280180001
LC-37
TABLE 6

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
881.0	4051.4	-6	77.0
865.2	4535.7	9.7	37.0
850.0	5020.1	11.3	25.0
826.0	5805.0	11.4	19.0
748.2	8482.4	4.3	24.0
700.0	10251.2	1.0	18.0
611.2	13792.5	-5.2	18.0
550.6	16468.5	-9.0	20.0
509.2	18440.1	-13.8	47.0
500.0	18894.9	-15.0	62.0
484.8	19660.9	-16.6	77.0
429.4	22622.7	-23.4	69.0
414.4	23474.9	-25.7	75.0
400.0	24316.0	-27.3	67.0
378.2	25636.0	-30.4	71.0
364.0	26530.3	-31.1	39.0
343.8	27852.8	-34.7	39.0
300.0	30929.8	-41.3	44.0

STATION ALTITUDE 4051.37 FEET SL
 28 JAN. 62 0600 HRS MSJ
 ASCENSION NO. 1

GEOMETRIC DATA
 020013000
 LC-37

GEOMETRIC DATA
 020013000
 LC-37

TABLE 7

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND METERS PER SECOND	WIND DATA WIND DIRECTION WIND SPEED KNOTS	INDEX OF REFRACTION
4051.4	881.0	-6	-4.1	77.0	1123.9	643.8	0	1.000273
4500.0	866.4	8.9	-3.9	39.9	1067.8	655.0	3.1	1.000260
5000.0	850.6	11.2	-7.8	25.5	1040.4	657.5	6.6	1.000248
5500.0	835.2	11.4	-10.0	21.3	1021.4	657.5	10.0	1.000241
6000.0	820.1	10.9	-11.6	19.4	1004.6	656.9	13.5	1.000236
6500.0	805.1	9.6	-12.1	20.3	990.9	655.4	12.7	1.000232
7000.0	790.3	8.2	-12.6	21.2	977.4	653.9	10.4	1.000229
7500.0	775.9	6.9	-13.2	22.2	964.1	652.3	10.7	1.000225
8000.0	761.7	5.6	-13.8	23.1	951.0	650.7	11.6	1.000222
8500.0	747.7	4.3	-14.5	23.9	938.0	649.2	13.6	1.000219
9000.0	733.8	3.3	-16.2	22.2	923.7	648.1	16.0	1.000214
9500.0	720.1	2.4	-17.9	20.5	909.6	646.9	17.8	1.000210
10000.0	706.7	1.5	-19.7	18.9	895.8	645.8	18.8	1.000206
10500.0	693.4	.6	-21.0	18.0	881.9	644.7	19.8	1.000202
11000.0	680.2	-3.3	-21.7	18.0	868.0	643.7	21.2	1.000199
11500.0	667.3	-1.2	-22.4	18.0	854.3	642.6	22.9	1.000195
12000.0	654.6	-2.1	-23.1	18.0	840.8	641.6	24.9	1.000192
12500.0	642.2	-2.9	-23.9	18.0	827.5	640.6	26.9	1.000189
13000.0	630.0	-3.8	-24.6	18.0	814.5	639.5	28.6	1.000186
13500.0	618.1	-4.7	-25.3	18.0	801.7	638.5	30.1	1.000183
14000.0	606.3	-5.5	-25.9	18.2	788.7	637.5	31.6	1.000180
14500.0	594.6	-6.2	-26.3	18.5	775.6	636.7	32.3	1.000177
15000.0	583.1	-6.9	-26.6	18.9	762.6	635.8	33.0	1.000174
15500.0	571.8	-7.6	-27.0	19.3	749.9	635.0	35.2	1.000171
16000.0	560.8	-8.3	-27.4	19.6	737.4	634.1	37.6	1.000168
16500.0	549.9	-9.1	-27.6	20.4	725.1	633.2	39.5	1.000165
17000.0	539.1	-10.3	-25.5	27.3	714.1	631.8	41.4	1.000163
17500.0	528.5	-11.5	-24.1	34.1	703.3	630.3	41.7	1.000161
18000.0	518.2	-12.7	-23.2	41.0	692.7	628.9	41.9	1.000160
18500.0	508.0	-14.0	-22.3	49.0	682.2	627.4	42.1	1.000158
19000.0	497.9	-15.2	-20.5	64.1	671.8	626.0	42.4	1.000156
19500.0	488.0	-16.3	-19.8	73.8	661.1	624.7	42.9	1.000155
20000.0	478.1	-17.4	-20.6	76.1	650.6	623.3	44.0	1.000152
20500.0	468.4	-18.5	-21.9	74.7	640.3	621.9	46.9	1.000149
21000.0	458.9	-19.7	-23.2	73.4	630.2	620.5	48.6	1.000146
21500.0	449.6	-20.8	-24.5	72.0	620.3	619.1	49.5	1.000143
22000.0	440.5	-22.0	-25.8	70.7	610.5	617.6	49.2	1.000140
22500.0	431.6	-23.1	-27.1	69.3	600.9	616.2	49.3	1.000139
23000.0	422.7	-24.4	-28.0	71.7	591.7	614.6	51.4	1.000135
23500.0	414.0	-25.7	-28.9	74.8	582.6	613.4	52.8	1.000132

STATION ALTITUDE 4051.37 FEET MSL
28 JAN. 82 0600 HRS MST
ASCENSION NO. 1

UPPER AIR DATA
0280180001
LC-37

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (DEGREES TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	405.4	-26.7	-30.5	70.0	572.7	611.7	272.7	53.7	1.000131
24500.0	390.9	-27.7	-31.9	67.6	563.1	610.4	274.4	55.7	1.000128
25000.0	380.6	-28.9	-32.8	69.1	554.0	609.0	275.7	58.0	1.000126
25500.0	380.4	-30.1	-33.7	70.6	545.0	607.5	275.6	61.8	1.000124
26000.0	372.4	-30.7	-36.2	58.0	534.8	606.7	275.4	65.0	1.000121
26500.0	364.5	-31.1	-40.1	40.1	524.4	605.2	274.6	65.4	1.000118
27000.0	350.7	-32.4	-41.6	39.0	516.0	604.6	274.0	65.6	1.000116
27500.0	349.1	-33.7	-42.8	39.0	507.9	602.8	273.9	64.7	1.000114
28000.0	341.6	-35.1	-44.0	39.2	499.8	601.1	273.6	64.2	1.000112
28500.0	334.1	-36.5	-45.1	40.1	491.8	599.3	273.1	64.5	1.000110
29000.0	328.8	-37.9	-46.2	40.9	483.8	597.6	272.4	66.3	1.000108
29500.0	319.6	-39.3	-47.3	41.7	476.1	595.8			1.000107
30000.0	312.6	-40.7	-48.5	42.5	468.5	594.0			1.000105
30500.0	305.8	-42.1	-49.6	43.3	461.0	592.2			1.000103

STATION ALTITUDE 4051.37 FEET MSL
28 JAN. 82
ASCENSION 140. 1

MANDATORY LEVEL
0280130001
LC-37
TABLE 8

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT DEGREES	PERCENT		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5016.	11.3	-8.0	25.		184.1	6.7
800.0	6673.	9.1	-12.3	21.		187.4	11.9
750.0	8411.	4.5	-14.4	24.		194.7	13.2
700.0	10241.	1.0	-20.6	18.		206.2	19.2
650.0	12183.	-2.4	-23.4	16.		225.6	25.7
600.0	14252.	-5.9	-26.1	18.		237.1	32.1
550.0	16475.	-9.1	-27.6	20.		249.1	39.4
500.0	18868.	-15.0	-20.6	62.		263.5	42.3
450.0	21456.	-20.8	-24.5	72.		263.8	49.4
400.0	24276.	-27.3	-31.5	67.		273.7	54.8
350.0	27391.	-33.6	-42.7	39.		273.9	64.8
300.0	30869.	-43.3	-50.6	44.			

STATION ALTITUDE 3989.00 FEET MSL
28 JAN. 62 0700 HRS MST
ASCENSION NO. 31

STRATIGRAPHIC LEVEL DATA
02R0020031
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LONG DEG

TABLE 9

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
881.2	3989.0	-2	61.0
871.3	4290.2	7.2	45.0
860.2	4639.3	11.6	35.0
850.0	4960.8	11.9	25.0
815.6	6109.3	11.4	22.0
700.0	10219.2	1.8	23.0
636.8	12706.4	-2.3	17.0
610.2	13813.5	-5.4	43.0
592.8	14559.3	-5.8	18.0
524.6	17675.3	-11.2	21.0
500.0	18879.6	-14.8	67.0
483.6	19707.2	-16.7	71.0
475.4	20129.6	-17.2	66.0
466.8	20579.2	-18.2	36.0
436.0	22243.3	-22.2	33.0
428.0	22690.2	-23.4	51.0
413.0	23545.9	-25.2	43.0
405.8	23965.8	-25.8	46.0
400.0	24308.5	-26.6	66.0
388.3	25010.7	-28.0	77.0
377.0	25706.1	-28.9	45.0
362.8	26605.7	-31.3	43.0
309.0	30269.7	-41.5	
300.0	30929.3	-42.0	

STATION ALTITUDE 3989.00 FEET SL
23 JUL 62 0700 HRS EDT
ASCENSION I.D. 31

WIND DATA
070000Z JUL 62
001100Z JUL 62

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE 10

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE DEMPHIT DEGREES	REL. HUMID. PERCENT	DENSITY G/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (TYP)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	801.2	-2	-6.8	61.0	1122.9	044.1	120.0	6.0	1.000209
4000.0	800.8	.1	-6.7	66.4	1121.3	044.5	120.0	6.0	1.000209
4500.0	864.6	9.8	-3.9	59.0	1062.1	050.0	145.0	7.1	1.000209
5000.0	849.6	11.9	-7.5	29.0	1030.0	050.2	162.2	9.1	1.000247
5500.0	835.6	11.7	-8.0	23.0	1019.2	050.0	172.2	11.0	1.000242
6000.0	818.6	11.4	-9.3	22.5	1000.6	057.7	177.4	13.5	1.000237
6500.0	803.6	10.5	-10.3	22.1	985.7	050.5	170.7	12.1	1.000233
7000.0	788.8	9.3	-11.2	22.2	971.7	055.1	178.6	10.9	1.000229
7500.0	774.3	8.1	-12.1	22.5	957.6	055.0	169.9	10.8	1.000225
8000.0	750.1	7.0	-13.0	22.5	944.2	052.4	201.5	11.4	1.000221
8500.0	740.1	5.8	-13.9	22.6	930.6	051.0	211.9	13.3	1.000217
9000.0	732.4	4.6	-14.8	22.7	917.6	049.6	220.4	15.1	1.000214
9500.0	718.9	3.5	-15.3	22.6	904.5	040.5	220.1	16.9	1.000210
10000.0	705.7	2.3	-16.7	22.9	891.7	040.9	232.2	19.0	1.000207
10500.0	692.6	1.3	-17.3	22.3	878.2	045.7	234.7	21.3	1.000203
11000.0	679.5	.5	-19.2	21.1	864.4	044.7	235.3	23.2	1.000199
11500.0	666.7	-2.3	-20.5	19.9	850.7	043.7	236.0	24.9	1.000196
12000.0	654.1	-1.1	-21.0	18.7	837.3	042.7	238.4	25.6	1.000192
12500.0	641.8	-2.0	-23.0	17.5	824.0	041.7	239.9	26.4	1.000188
13000.0	629.6	-3.1	-20.0	23.9	811.7	040.4	240.2	27.3	1.000187
13500.0	617.6	-4.5	-17.4	35.0	800.0	038.0	241.9	28.5	1.000186
14000.0	605.0	-5.5	-17.9	36.7	787.6	037.0	244.0	29.8	1.000183
14500.0	594.2	-5.8	-25.1	20.0	773.7	037.2	248.5	31.5	1.000177
15000.0	582.6	-6.6	-26.6	18.6	761.0	036.2	252.9	33.6	1.000173
15500.0	571.3	-7.4	-27.1	14.9	748.7	035.2	253.7	36.5	1.000170
16000.0	560.2	-8.3	-27.5	14.4	735.6	034.1	254.2	39.5	1.000167
16500.0	549.4	-9.2	-27.0	13.9	724.1	033.1	252.5	40.9	1.000165
17000.0	530.7	-10.0	-27.5	10.5	711.9	032.1	251.0	42.1	1.000162
17500.0	520.2	-10.9	-26.0	20.8	701.4	031.0	255.5	41.2	1.000159
18000.0	517.9	-12.2	-25.0	33.4	690.8	029.5	259.4	41.1	1.000158
18500.0	507.6	-13.7	-21.3	32.5	680.9	027.0	262.9	41.8	1.000158
19000.0	497.6	-15.1	-19.7	67.0	671.0	020.1	263.1	41.8	1.000157
19500.0	487.7	-16.2	-20.4	70.0	660.6	019.7	262.4	41.6	1.000154
20000.0	477.9	-17.0	-21.0	67.5	650.5	018.7	260.0	41.5	1.000151
20500.0	468.3	-18.0	-27.5	42.9	639.1	017.4	260.5	44.0	1.000146
21000.0	450.8	-19.2	-30.2	36.7	629.2	015.9	260.0	46.8	1.000143
21500.0	449.5	-20.4	-31.8	35.7	614.4	015.9	262.7	46.6	1.000140
22000.0	440.4	-21.6	-33.5	33.7	606.7	016.0	265.1	45.9	1.000138
22500.0	431.4	-22.9	-31.4	33.3	600.5	016.4	263.5	46.0	1.000137
23000.0	422.5	-24.1	-31.9	38.1	590.7	015.0	271.2	44.6	1.000134

STATION ALTITUDE 3989.00 FEET SL
29 JAN. 62 0700 HRS MST
ASCENSION I.O. 31

UPPER AIR DATA
0200020031
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37013 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE DEWPOINT DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
23500.0	413.8	-25.1	-33.9	43.4	581.0	613.7	273.3	1.000132
24000.0	405.2	-25.9	-31.6	48.0	579.7	612.7	274.1	1.000129
24500.0	396.8	-27.3	-31.2	69.0	561.9	611.0	274.3	1.000128
25000.0	388.5	-29.0	-31.7	76.8	554.0	608.9	275.1	1.000126
25500.0	380.3	-28.9	-35.2	56.5	542.3	608.9	275.8	1.000123
26000.0	372.3	-29.7	-37.9	48.3	532.6	607.9	275.5	1.000120
26500.0	364.4	-31.0	-39.4	43.2	524.2	606.3	274.9	1.000118
27000.0	356.6	-32.4	-41.8	38.4**	515.9	604.5	273.9	1.000116
27500.0	348.9	-33.8	-44.5	32.5**	507.7	602.8	273.5	1.000114
28000.0	341.3	-35.2	-47.6	26.6**	499.6	601.0	273.3	1.000112
28500.0	333.9	-36.6	-50.9	20.8**	491.7	599.2	273.9	1.000110
29000.0	326.7	-38.0	-54.9	14.9**	483.9	597.5	274.5	1.000108
29500.0	319.6	-39.4	-60.0	9.0**	476.2	595.7	275.0	1.000106
30000.0	312.7	-40.7	-68.7	3.2**	468.7	593.9		1.000104
30500.0	305.8	-41.7			460.3	592.7		1.000103

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

GEODETIC COORDINATES
32.0043 LAT DEG
106.37033 LON DEG

EMPIRICAL DATA
0200020031
WHITE SANDS

TABLE 11

STATION ALTITUDE 3989.00 FEET MSL
28 JAN. 02 0700 HRS MST
ASCENSION NO. 31

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	ATMOSPHERIC	OF WIND		DIRECTION (DEGREES TRUE)	SPEED KNOTS
		DEGREES	CENTIGRADE			
850.0	4963.	11.9	-7.5	25.	161.3	8.9
800.0	6623.	10.2	-10.5	22.	176.5	11.7
750.0	8370.	6.1	-13.7	23.	209.5	12.8
700.0	10209.	1.8	-17.1	23.	233.3	20.0
650.0	12157.	-1.4	-22.4	18.	239.2	25.8
600.0	14231.	-5.6	-21.0	20.	245.9	30.6
550.0	16456.	-8.1	-24.0	20.	252.4	40.8
500.0	18853.	-14.8	-19.5	67.	263.2	41.8
450.0	21443.	-20.3	-31.7	35.	262.6	40.6
400.0	24268.	-26.6	-31.0	66.	274.2	52.5
350.0	27390.	-33.6	-44.1	33.**	273.5	61.3
300.0	30668.	-42.0				

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

STATION ALTITUDE 3989.00 FEET ASL
26 JAN. 62 0900 HRS MST
ASCENSION I.O. 32

STATION TEMPERATURE DATA
075000-0002
WHITE SANDS

TABLE 12

GEODETIC COORDINATES
32°40'04.3" LAT DEC
100°37'03.3" LONG DEC

PRESSURE	GEOMETRIC ALTITUDE MSL FEET	AIR TEMPERATURE DEGREES CENTIGRADE	DEWPOINT PERCENT	REL. HUM.
832.2	3989.0	3.1	-5.5	53.0
865.0	4518.9	0.1	-5.4	41.0
855.4	4323.5	11.2	-7.1	27.0
850.6	4097.1	11.5	-5.6	35.0
790.4	6085.9	10.0	-5.5	33.0
745.5	6571.9	6.4	-8.7	33.0
700.0	10257.3	2.7	-11.6	34.0
655.0	11989.2	-2.6	-15.4	32.0
604.2	14124.5	-2.4	-19.7	25.0
587.4	14659.4	-3.0	-20.2	25.0
539.4	17058.4	-7.9	-24.0	20.0
500.0	16977.8	-13.3	-21.3	51.0
491.6	19401.7	-13.9	-20.6	33.0
436.0	22357.9	-21.3	-32.3	30.0
416.4	23470.1	-23.3	-33.6	30.0
400.0	24433.9	-25.4	-29.4	69.0
395.0	24734.2	-25.7	-29.7	69.0
381.0	25502.0	-27.5	-32.0	65.0
347.2	27764.3	-27.9	-36.9	67.0
331.4	28840.4	-36.0	-40.5	63.0
314.4	30038.1	-34.6	-43.3	61.0
300.0	31093.8	-40.7		
290.2	31835.5	-42.5		
278.4	32753.9	-45.0		
272.0	34264.2	-46.3		
255.0	36074.2	-45.4		
250.6	35116.2	-43.4		
246.3	35940.6	-43.6		
225.6	37303.2	-45.4		
200.0	39993.3	-51.8		
171.7	43226.2	-55.2		
155.2	45334.0	-50.2		
150.0	46034.3	-59.0		
138.8	47636.9	-61.7		
123.2	50038.6	-66.5		
117.2	51039.9	-64.6		
100.0	54201.3	-68.4		
79.8	54653.5	-69.5		
70.0	61200.7	-65.9		
57.6	65169.8	-66.5		

STATION ALTITUDE 3409.00 FEET SL
 28 JAN. 52 0900 HRS MST
 ASCENSION, I.O. 32

STATION LOCAL LEVEL DATA
 1780020031
 WHITE SANDS

GEODETIC COORDINATES
 52.40043 LAT DEG
 106.57033 LONG DEG

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS, MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
56.0	68040.9	-40.4	
57.0	73937.1	-50.5	
32.0	76225.8	-51.0	
30.0	78745.9	-51.0	
25.6	82170.5	-42.0	
23.2	84315.2	-47.1	
20.0	87551.6	-40.3	
15.0	92717.1	-45.1	
13.2	96709.2	-43.5	
10.0	102021.1	-41.0	
8.9	105554.0	-30.2	

STATION ALTITUDE 3949.00 FEET 50
28 JAN. 62 0900 HRS EST
ACCELERATION 00. 32

GEOPHYSICAL DATA
TABLE 13

GEOLITIC COORDINATES
32.50043 LAT EEO
106.37033 LONG EEO

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUMID. PERCENT	DENSITY GM/CM ³ AT P	SPEED OF SOUND M/SEC	AIR FLOW CM/SEC (100)	SPEED KNOTS	INDEX OF REFRACTION
3949.0	882.2	3.1	-5.5	53.0	1110.0	640.1	0.0	0.0	1.000208
4000.0	881.8	3.2	-5.5	52.6	1109.0	640.2	173.0	.1	1.000207
4500.0	865.6	8.9	-3.5	41.4	1067.0	654.9	173.0	4.5	1.000200
5000.0	849.9	11.3	-3.0	35.0	1036.7	657.7	173.0	8.9	1.000253
5500.0	834.5	11.0	-4.1	34.5	1021.1	657.3	173.0	13.3	1.000249
6000.0	819.4	10.6	-4.0	34.0	1005.6	657.0	174.9	16.2	1.000244
6500.0	804.6	10.3	-5.0	33.5	986.0	656.0	173.0	16.2	1.000240
7000.0	790.0	10.0	-5.5	33.0	970.2	656.1	164.1	15.7	1.000235
7500.0	775.6	8.8	-6.5	33.0	950.4	654.8	191.7	14.9	1.000231
8000.0	761.4	7.7	-7.5	33.0	942.0	653.4	199.1	15.5	1.000227
8500.0	747.5	6.6	-8.5	33.0	929.4	652.1	205.5	16.7	1.000223
9000.0	733.7	5.5	-9.4	33.3	915.9	650.8	214.5	19.5	1.000219
9500.0	720.1	4.4	-10.3	33.6	902.6	649.5	221.4	22.4	1.000215
10000.0	706.8	3.3	-11.1	33.8	889.5	648.2	227.7	23.9	1.000211
10500.0	693.6	2.2	-12.1	33.7	876.5	646.9	232.1	25.1	1.000207
11000.0	680.6	1.2	-13.2	33.1	863.2	645.7	234.2	25.0	1.000203
11500.0	667.8	.2	-14.3	32.6	850.2	644.5	235.9	25.7	1.000200
12000.0	655.3	-8	-15.4	32.0	837.5	643.3	237.1	27.0	1.000196
12500.0	642.9	-1.2	-16.4	30.3	822.7	642.0	240.7	28.7	1.000192
13000.0	630.7	-1.6	-17.4	28.7	808.5	641.3	244.4	30.5	1.000188
13500.0	618.8	-1.9	-18.4	27.0	794.1	641.9	248.4	32.7	1.000184
14000.0	607.1	-2.3	-19.0	25.4	780.2	641.4	251.5	35.0	1.000181
14500.0	595.6	-2.7	-20.0	25.0	766.5	640.9	255.0	37.1	1.000177
15000.0	584.2	-3.3	-20.4	25.1	753.0	640.2	254.5	38.8	1.000174
15500.0	573.0	-4.4	-21.3	25.3	742.5	639.9	253.0	39.6	1.000171
16000.0	562.0	-5.5	-22.2	25.5	731.1	639.5	251.9	39.9	1.000168
16500.0	551.2	-6.7	-23.0	25.7	720.1	639.2	250.9	39.8	1.000165
17000.0	540.6	-7.8	-23.9	26.0	709.2	639.0	250.4	39.7	1.000163
17500.0	530.1	-9.1	-22.8	31.8	699.0	635.2	250.5	39.8	1.000161
18000.0	519.7	-10.5	-22.0	33.3	686.9	631.0	249.0	40.1	1.000159
18500.0	509.5	-12.0	-21.5	44.6	679.0	629.9	247.0	40.0	1.000157
19000.0	499.6	-13.3	-21.5	50.1	669.3	628.2	246.7	41.2	1.000155
19500.0	489.6	-14.1	-20.8	33.1	658.2	627.1	247.5	42.0	1.000150
20000.0	479.8	-15.4	-27.8	33.6	648.2	625.0	246.0	43.2	1.000148
20500.0	470.2	-16.6	-28.7	30.1	638.3	624.1	251.1	45.1	1.000145
21000.0	460.7	-17.9	-29.7	30.6	628.5	622.5	252.5	46.5	1.000143
21500.0	451.5	-19.2	-30.7	35.1	618.9	621.0	253.0	47.3	1.000141
22000.0	442.4	-20.4	-31.0	35.0	609.5	619.5	254.2	47.6	1.000138
22500.0	433.4	-21.6	-32.5	36.3	600.0	618.0	255.9	47.4	1.000136
23000.0	424.6	-22.5	-33.1	37.2	589.8	616.9	258.1	48.4	1.000134

GEODETIC COORDINATES
32°40'43" LAT N
106°27'53" LONG W

STATION ALTITUDE 3989.0 FEET
28 JAN. 52 0900 HRS
ASCENSION NO. 32

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	RELATIVE HUMIDITY PERCENT	WIND SPEED KNOTS	WIND DIRECTION DEGREES TRUE	INDEX OF REFRACTION
23500.0	413.9	-23.4	55.0	50.0	260.4	1.000131
24000.0	407.3	-24.5	55.0	52.5	263.0	1.000150
24500.0	398.9	-25.5	57.0	55.3	265.5	1.000128
25000.0	390.6	-26.3	57.0	57.9	268.3	1.000126
25500.0	382.5	-27.3	55.4	60.5	270.9	1.000123
26000.0	374.4	-28.5	55.4	61.7	272.0	1.000121
26500.0	366.5	-29.8	55.4	62.4	272.7	1.000119
27000.0	358.8	-31.0	56.3	63.0	272.9	1.000117
27500.0	351.2	-32.2	56.3	63.4	273.0	1.000115
28000.0	343.7	-33.6	56.1	64.2	273.1	1.000113
28500.0	336.3	-35.0	54.3	65.0	273.1	1.000111
29000.0	329.1	-36.3	52.7	65.6	273.1	1.000109
29500.0	321.9	-37.4	51.9	66.2	273.2	1.000107
30000.0	314.9	-38.5	51.1	66.8	273.6	1.000105
30500.0	308.0	-39.5	50.2	67.5	274.3	1.000103
31000.0	301.3	-40.5	50.2	68.3	274.9	1.000101
31500.0	294.6	-41.7	50.2	69.1	275.2	1.000099
32000.0	288.0	-42.9	50.1	71.7	275.3	1.000097
32500.0	281.6	-44.3	50.5	74.5	275.5	1.000095
33000.0	275.3	-45.6	50.7	77.6	274.2	1.000094
33500.0	269.1	-46.2	50.7	80.6	273.1	1.000092
34000.0	263.0	-45.8	50.1	82.7	271.7	1.000090
34500.0	257.1	-45.5	50.4	84.8	270.4	1.000088
35000.0	251.3	-43.9	50.9	86.4	269.4	1.000085
35500.0	245.7	-43.6	50.2	88.0	268.4	1.000083
36000.0	240.2	-44.1	50.9	89.6	268.9	1.000081
36500.0	234.8	-44.6	50.9	91.3	269.2	1.000080
37000.0	229.6	-45.0	50.4	92.5	269.0	1.000078
37500.0	224.4	-45.7	50.7	93.5	268.5	1.000077
38000.0	219.3	-46.9	50.0	94.5	268.1	1.000075
38500.0	214.3	-48.1	50.4	95.6	268.9	1.000074
39000.0	209.4	-49.4	50.2	94.9	268.0	1.000073
39500.0	204.6	-50.6	50.1	92.8	268.9	1.000071
40000.0	199.9	-51.8	50.9	88.5	267.0	1.000070
40500.0	195.3	-52.3	50.1	82.7	266.0	1.000069
41000.0	190.7	-52.9	50.2	79.2	266.1	1.000067
41500.0	186.3	-53.4	50.5	77.1	265.9	1.000066
42000.0	181.9	-53.9	50.8	76.6	266.1	1.000064
42500.0	177.7	-54.4	50.8	77.1	266.0	1.000063
43000.0	173.6	-55.0	50.5	77.8	266.4	1.000062

** AT LAST ONE ADDS REFRACTIVE INDEX VALUE AND GETS WIND DIRECTION

GEOMETRIC COORDINATES
32.00043 LAT DEG
100.57033 LONG DEG

STATION AIR DATA
32.00043
100.57033

STATION ALTITUDE 3900.00 FEET MSL
28 JAN 62 0900 HRS EST
ASCENSION NO. 32

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	AIR TEMPERATURE DEGREES CELSIUS	REL. HUMID. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (10) SPEED (10) KNOTS	INDEX OF REFRACTION
43500.0	169.5	-55.7		271.5	574.5	257.0	1.000000
44000.0	165.5	-56.7		266.5	573.2	256.7	1.000059
44500.0	161.5	-57.6		261.1	571.9	255.9	1.000058
45000.0	157.7	-58.6		256.0	570.7	254.9	1.000057
45500.0	154.0	-59.3		250.8	569.7	253.5	1.000056
46000.0	150.3	-59.6		245.1	569.3	252.4	1.000055
46500.0	146.7	-60.2		239.9	568.5	251.7	1.000053
47000.0	143.1	-60.9		234.9	567.6	251.2	1.000052
47500.0	139.7	-61.5		229.9	566.7	250.9	1.000051
48000.0	136.3	-62.4		225.3	565.5	250.6	1.000050
48500.0	133.0	-63.4		220.6	564.2	250.6	1.000049
49000.0	129.7	-64.4		216.5	562.8	250.5	1.000048
49500.0	126.5	-65.4		212.2	561.5	251.0	1.000047
50000.0	123.4	-66.4		208.0	560.1	251.2	1.000046
50500.0	120.4	-67.6		202.1	561.2	251.1	1.000045
51000.0	117.4	-68.7		196.2	562.5	251.0	1.000044
51500.0	114.5	-69.2		191.8	561.9	251.2	1.000043
52000.0	111.7	-70.3		187.6	561.0	251.6	1.000042
52500.0	108.9	-71.4		183.5	560.2	252.1	1.000041
53000.0	106.2	-72.5		179.5	559.4	253.6	1.000040
53500.0	103.6	-73.6		175.6	558.6	253.6	1.000039
54000.0	101.1	-74.7		171.7	557.8	254.7	1.000038
54500.0	98.5	-75.8		167.7	557.4	255.6	1.000037
55000.0	96.1	-76.6		163.6	557.2	256.3	1.000036
55500.0	93.7	-77.7		159.6	557.0	257.0	1.000036
56000.0	91.3	-78.8		155.7	556.9	257.3	1.000035
56500.0	89.0	-79.0		151.9	556.7	257.5	1.000034
57000.0	86.6	-79.1		148.2	556.5	257.6	1.000033
57500.0	84.6	-79.2		144.6	556.3	257.6	1.000032
58000.0	82.5	-79.3		141.1	556.2	257.6	1.000031
58500.0	80.5	-79.5		137.6	556.0	257.6	1.000031
59000.0	78.5	-79.6		133.9	556.0	257.4	1.000030
59500.0	76.5	-79.5		130.1	557.5	257.5	1.000029
60000.0	74.6	-79.7		126.5	556.5	257.6	1.000028
60500.0	72.8	-79.8		122.9	559.4	257.7	1.000027
61000.0	70.9	-80.3		119.5	560.3	257.7	1.000027
61500.0	69.2	-80.9		116.3	560.6	256.1	1.000026
62000.0	67.5	-81.5		113.5	560.7	259.1	1.000025
62500.0	65.8	-82.1		110.7	560.6	260.0	1.000025
63000.0	64.2	-82.2		108.0	560.5	261.2	1.000024

STATION ALTITUDE 3989.00 FEET
29 JAN. 62 0908 HRS
ASCENSION NO. 32

COAST AIR DATA
IN 000000Z
000000Z

STATION ALTITUDE 3989.00 FEET
29 JAN. 62 0908 HRS
ASCENSION NO. 32

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUMID. PERCENT	DENSITY G/CM ³	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OR REFRACTION
03500.0	62.6	-66.2	105.4	500.4	262.2	43.9	1.000023
04000.0	61.1	-66.3	102.9	500.3	262.5	45.2	1.000023
04500.0	59.6	-66.4	100.4	500.2	262.5	44.8	1.000022
05000.0	58.1	-66.5	97.9	500.1	262.0	43.6	1.000022
05500.0	56.7	-65.8	95.2	501.0	261.5	37.1	1.000021
06000.0	55.3	-64.7	92.4	502.4	260.7	30.7	1.000021
06500.0	53.9	-63.7	89.7	503.0	259.7	24.4	1.000020
07000.0	52.6	-62.6	87.1	503.3	258.0	18.2	1.000019
07500.0	51.4	-61.5	84.5	503.7	255.1	13.7	1.000019
08000.0	50.1	-60.5	82.1	503.1	252.2	12.8	1.000018
08500.0	48.9	-60.3	80.0	503.4	248.7	11.8	1.000018
09000.0	47.7	-60.1	78.0	503.7	249.5	11.9	1.000017
09500.0	46.6	-59.9	76.1	503.9	250.5	12.1	1.000017
10000.0	45.5	-59.8	74.3	509.1	251.9	11.8	1.000017
10500.0	44.4	-59.6	72.4	509.3	253.7	11.0	1.000016
11000.0	43.3	-59.4	70.6	509.5	255.7	10.3	1.000016
11500.0	42.3	-59.3	68.9	509.7	256.1	10.4	1.000015
12000.0	41.3	-59.1	67.2	509.9	256.6	10.6	1.000015
12500.0	40.3	-59.0	65.6	570.2	256.6	11.1	1.000015
13000.0	39.3	-58.8	63.9	570.4	257.0	11.9	1.000014
13500.0	38.4	-58.6	62.4	570.6	257.1	12.7	1.000014
14000.0	37.5	-58.3	60.6	571.0	255.9	13.3	1.000014
14500.0	36.6	-57.0	59.0	572.7	254.7	13.6	1.000013
15000.0	35.8	-55.7	57.5	574.4	253.4	14.3	1.000013
15500.0	34.9	-54.4	55.6	576.1	251.6	14.6	1.000012
16000.0	34.1	-53.1	54.0	577.0	249.6	14.9	1.000012
16500.0	33.3	-51.8	52.4	579.5	249.4	15.8	1.000012
17000.0	32.5	-51.0	51.0	580.7	248.9	17.2	1.000011
17500.0	31.0	-51.0	49.6	580.7	250.2	18.6	1.000011
18000.0	31.1	-51.0	48.7	580.7	251.3	22.3	1.000011
18500.0	30.3	-51.0	47.6	580.7	252.2	26.4	1.000011
19000.0	29.6	-50.9	46.5	580.6	252.6	30.5	1.000010
19500.0	29.0	-50.7	45.4	581.1	252.5	30.9	1.000010
20000.0	28.3	-50.5	44.3	581.5	251.9	31.3	1.000010
20500.0	27.7	-50.3	43.2	581.6	251.1	30.2	1.000010
21000.0	27.0	-50.1	42.2	581.9	249.0	24.3	1.000009
21500.0	26.4	-49.9	41.2	582.1	245.7	18.6	1.000009
22000.0	25.8	-49.7	40.2	582.4	240.6	14.3	1.000009
22500.0	25.2	-49.2	39.2	582.0	233.4	10.6	1.000009
23000.0	24.6	-48.6	38.2	582.7	221.1	7.7	1.000009

STATION ALTITUDE 3950.00 FEET
 DATE JAN. 62 0900 HRS. 32
 ASSUMPTIONS 10. 32

STATION NAME
 10. 3200000
 0.110 5000

STATION COORDINATES
 32.40043 LAT
 106.37035 LONG

GEOMETRIC ALTITUDE FT/FEET	PRESSURE MILLIBARS	TEMPERATURE F/°C	RELATIVE HUMIDITY PERCENT	DENSITY G/CM ³	SPEED OF SOUND M/SEC	WIND VELOCITY M/SEC	WIND DIRECTION DEGREES	INDEX OF REFRACTION
63500.0	24.1	-48.1		37.5	344.5	264.2	5.9	1.000000
64000.0	23.5	-47.5		36.5	345.5	162.4	5.1	1.000000
64500.0	23.0	-47.2		35.5	346.0	157.5	5.2	1.000000
65000.0	22.5	-47.0		34.7	346.1	124.0	6.8	1.000000
65500.0	22.0	-47.9		34.0	344.7	107.0	9.6	1.000000
66000.0	21.5	-48.2		33.5	344.2	97.0	12.3	1.000007
66500.0	21.0	-48.6		32.0	343.8	91.1	13.7	1.000007
67000.0	20.5	-48.9		31.9	343.4	85.5	15.1	1.000007
67500.0	20.0	-49.3		31.2	342.9	80.0	15.4	1.000007
68000.0	19.6	-49.9		30.4	343.5	75.0	14.4	1.000007
68500.0	19.2	-48.5		29.7	343.9	69.0	13.4	1.000007
69000.0	18.7	-48.1		29.0	344.4	65.1	13.2	1.000000
69500.0	18.3	-47.7		28.5	344.9	61.0	13.4	1.000006
90000.0	17.9	-47.3		27.0	345.5	50.0	13.6	1.000000
90500.0	17.5	-46.9		26.9	346.0	50.7	15.4	1.000000
91000.0	17.1	-46.5		26.5	346.5	53.0	17.4	1.000000
91500.0	16.7	-46.1		25.0	347.0	64.0	19.3	1.000000
92000.0	16.3	-45.7		25.0	347.0	65.9	18.2	1.000000
92500.0	16.0	-45.3		24.4	348.1	67.1	17.1	1.000005
93000.0	15.6	-45.0		23.0	348.5	65.9	15.9	1.000005
93500.0	15.3	-44.8		23.5	348.7	72.9	14.1	1.000005
94000.0	14.9	-44.6		22.7	349.0	78.0	12.3	1.000005
94500.0	14.6	-44.4		22.2	349.2	64.7	10.7	1.000005
95000.0	14.3	-44.2		21.7	349.5	95.0	9.2	1.000005
95500.0	13.9	-44.0		21.2	349.6	111.4	8.3	1.000005
96000.0	13.6	-43.8		20.7	350.0	129.0	8.1	1.000005
96500.0	13.3	-43.6		20.2	350.5	140.0	8.7	1.000005
97000.0	13.0	-43.4		19.8	349.5	140.2	5.5	1.000004
97500.0	12.7	-43.3		19.5	349.7	60.4	6.1	1.000004
98000.0	12.5	-43.1		18.9	349.0	55.0	10.2	1.000004
98500.0	12.2	-43.0		18.4	349.0	20.0	13.0	1.000004
99000.0	11.9	-42.9		18.0	349.2	40.5	10.5	1.000004
99500.0	11.7	-42.7		17.0	349.4	72.0	9.2	1.000004
100000.0	11.4	-42.5		17.2	349.5	98.5	10.1	1.000004
100500.0	11.1	-42.5		16.8	349.7	129.5	11.9	1.000004
101000.0	10.9	-42.3		16.4	349.9	154.5	16.5	1.000004
101500.0	10.7	-42.2		16.1	349.1	167.4	22.8	1.000004
102000.0	10.4	-42.1		15.7	349.2	174.5	29.8	1.000005
102500.0	10.2	-41.9		15.4	349.4			1.000005
103000.0	10.0	-41.7		15.0	349.7			1.000005

STATION ALTITUDE 3989.00 FEET MSL
 28 JAN. 62 0900 HRS MST
 ASCENSION NO. 32

TIME 0600Z
 DATE 010000Z
 WIND DIRECTION

GEOMETRIC ALTITUDE
 MSL FEET

PRESSURE

TEMPERATURE

AIR DEWPOINT

REL. HUM.

PERCENT

WIND DIRECTION

WIND SPEED

WIND DIRECTION

WIND SPEED

WIND DIRECTION

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DIRECTION WIND SPEED WIND DIRECTION WIND SPEED	INDEX OF REFRACTION
105500.0	9.7	-41.2	14.0	1.0000003	1.0000003
104000.0	9.5	-40.7	14.5	1.0000003	1.0000003
104500.0	9.3	-40.2	13.9	1.0000003	1.0000003
105000.0	9.1	-39.7	13.6	1.0000003	1.0000003
105500.0	8.9	-39.3	13.3	1.0000003	1.0000003

STATION ALTITUDE 3989.00 FEET SE
28 JAN. 12 0900 HRS EST
ASCENSION NO. 32

STATION COORDINATES
LAT 39° 00' 00" S
LONG 106° 37' 00" W

STATION ALTITUDE 3989.00 FEET SE
28 JAN. 12 0900 HRS EST
ASCENSION NO. 32

STATION COORDINATES
LAT 39° 00' 00" S
LONG 106° 37' 00" W

TABLE 14

PRESSURE GEO-POTENTIAL		TEMPERATURE		REL. HUMID.		WIND DATA	
MILLIBARS	FEET	AIR	W. POINT	REL. HUMID.	W. POINT	VELOCITY (MPH)	SPEED (KNOTS)
850.0	4093.	11.3	-3.0	35.	173.0	8.9	
800.0	6051.	10.2	-5.2	35.	179.9	10.2	
750.0	8402.	9.0	-6.3	35.	204.3	10.5	
700.0	10267.	7.7	-11.0	30.	230.5	24.8	
650.0	12200.	-1.0	-15.0	31.	230.4	27.7	
600.0	14200.	-2.5	-19.0	29.	252.0	30.3	
550.0	16359.	-5.0	-23.1	20.	250.0	39.7	
500.0	18551.	-13.3	-21.3	31.	240.7	41.2	
450.0	21555.	-19.0	-30.0	35.	253.1	47.4	
400.0	24393.	-25.0	-29.4	69.	263.1	54.8	
350.0	27332.	-33.0	-30.5	67.	273.0	63.5	
300.0	31032.	-40.7			274.9	68.4	
250.0	35040.	-45.0			269.2	80.7	
200.0	3907.	-51.0			257.0	80.6	
175.0	42718.	-54.8			250.9	77.5	
150.0	45914.	-50.6			252.4	61.5	
125.0	49605.	-65.0			251.1	53.6	
100.0	54042.	-68.0			255.0	55.5	
80.0	58421.	-69.5			257.6	25.3	
70.0	61057.	-65.0			257.8	20.8	
60.0	64123.	-60.0			262.4	45.0	
50.0	67786.	-60.0			252.1	12.7	
40.0	72364.	-58.0			250.9	14.3	
30.0	78410.	-51.0			252.5	20.1	
25.0	82517.	-49.0			251.1	9.9	
20.0	87142.	-49.5			60.7	15.4	
15.0	93400.	-46.6			70.0	12.9	
10.0	102364.	-41.8					

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

DATE
FILME