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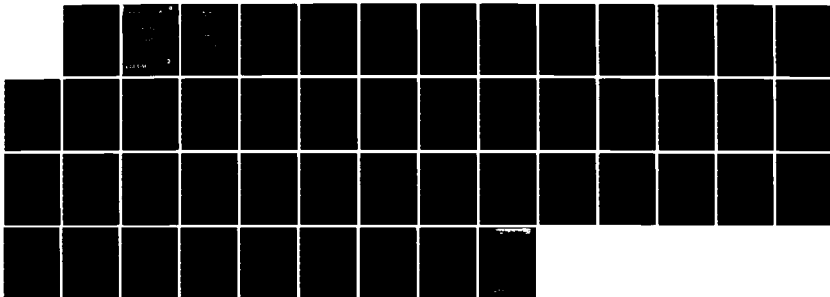
19321 AT MLRS MISSILE NUMBER 421 379 464 377 401 367
ROUND NUMBER V635/FE. (U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER AUG 84
ERADCOM/ASL-DR-1354

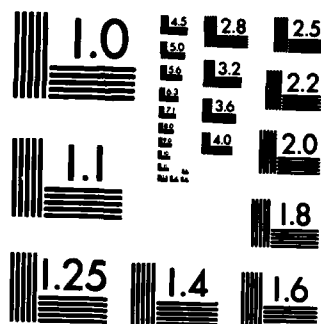
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Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. SUBJECT TERMS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19321 AT MLRS, Missile Number 421, 379, 464, 377, 401, 367, Round Number V635/FE-7 thru V640/FE-12 are presented in tabular form.		

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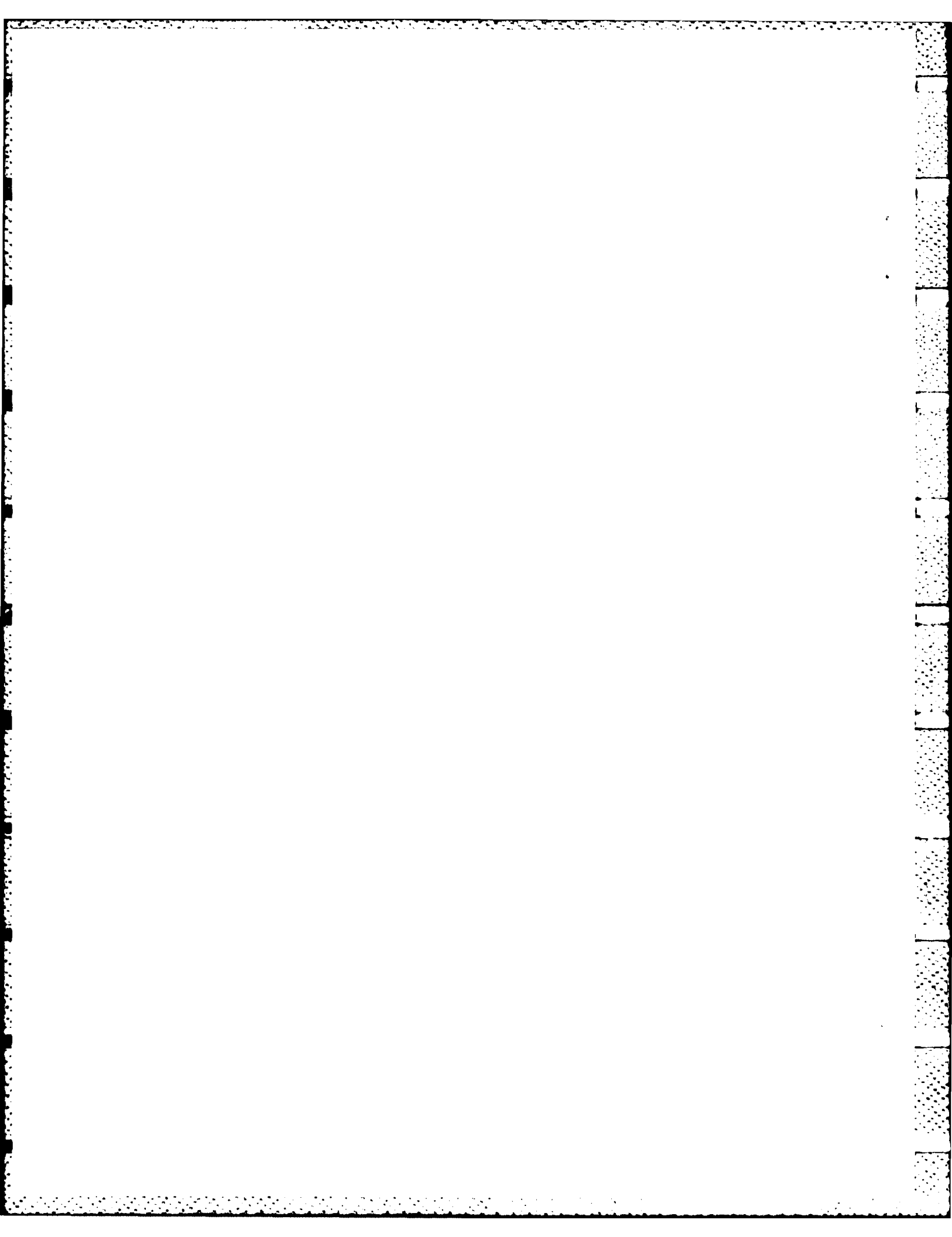
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INTRODUCTION

19321AT MLRS, Missile Number 421, 379, 464, 377, 401 and 367, Round Number V635/FE-7 thru V640/FE-12, were launched from Tula Gate, White Sands Missile Range (WSMR), New Mexico, at 1048:13, 1048:18, 1048:22, 1048:27, 1048:31 and 1048:36 MDT, 3 Aug 84. The scheduled launch times were 0850 MDT with a 4.5 second separation.

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 Tula Gate Met Site at T-0 minutes.

(2) Anemometer data were provided from existing tower-mounted anemometers at Tula Gate. 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

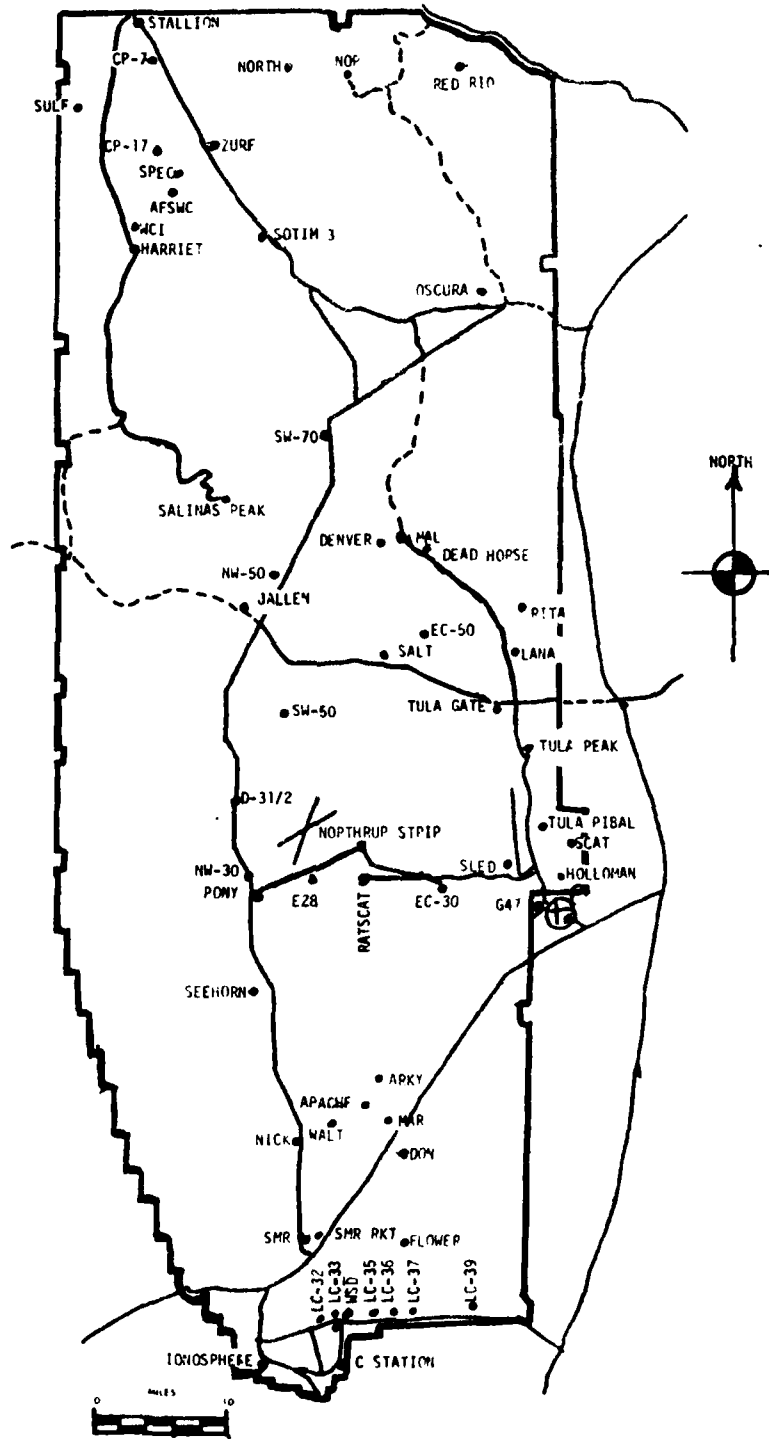
TULA GATE 2 km
DEAD HORSE 2 km

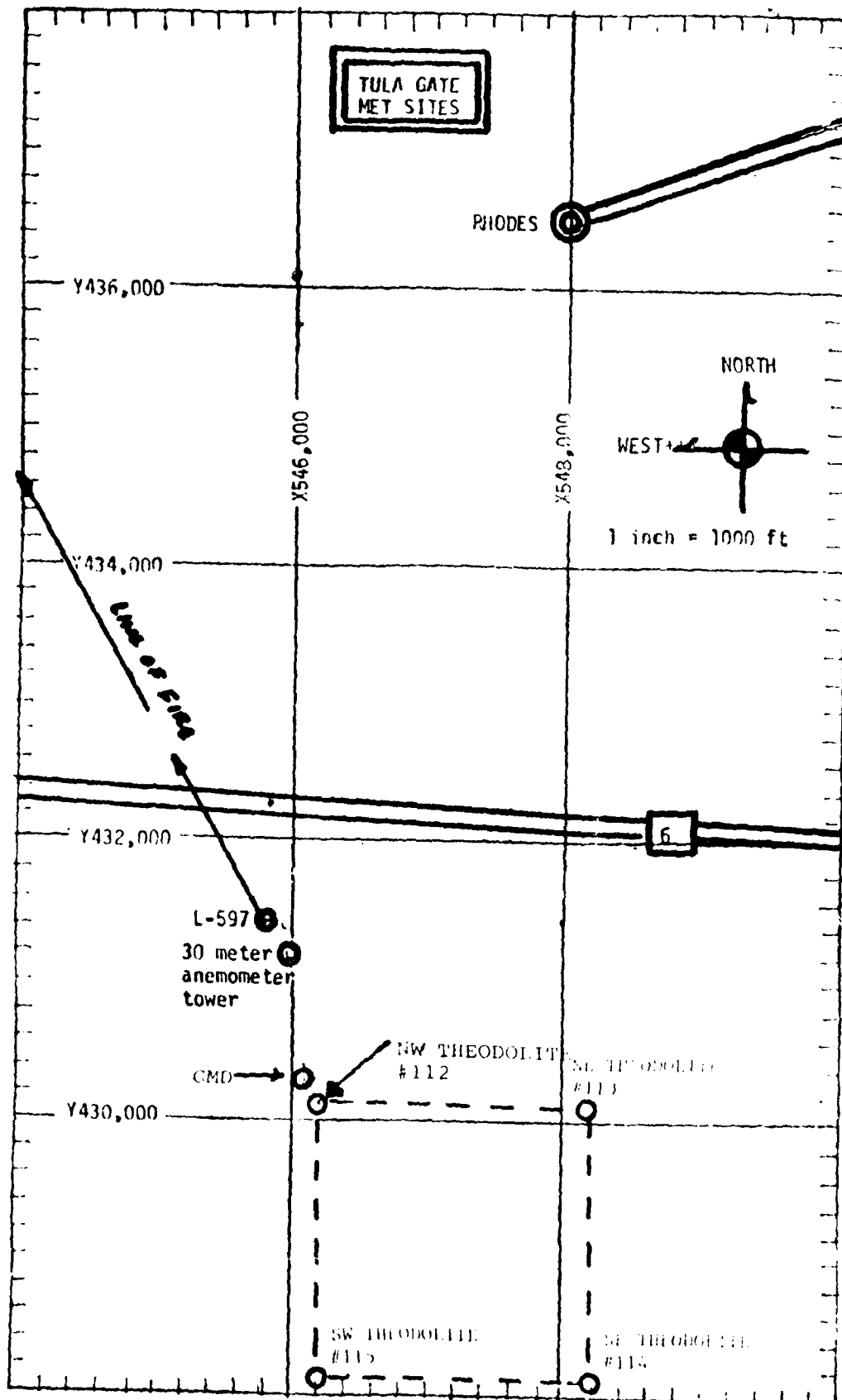
(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

RITA	0720 MDT
SALT SOTIM	0720 MDT
TULA GATE	0900 MDT
RITA	0900 MDT
SALT SOTIM	0900 MDT
TULA GATE	1048 MDT
RITA	1048 MDT
SALT SOTIM	1048 MDT

WSMR METEOROLOGICAL SITES





SYNOPTIC INFORMATION

TABLE 1		STATION		JULIA R	
DATE	3	AUG	1984	X= 546,204.20	Y= 430,125.39 H= 4108.59

TIME MDI	PRESSURE hPa	TEMPERATURE C	SEA POINT C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIRECTION degs In	WIND SPEED kts	CHARACTER kts	VISIBIL- ITY
1048	879.2	25.4	19.7	61		350	05		35

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
	1	CI	25,000				FEW CU OVR MTNS 17-1

PSYCHROMETRIC COMPUTATION

TIME: MDT	1048	
DOY BULB TEMP.	25.4	
WET BULB TEMP.	19.7	
WET BULB DEPP.	5.7	
DEW POINT	17.3	
RELATIVE HUMID.	61	

ANEMOMETER DATA - 30 Ft Level of 30 Meter Tower

[illegible]

TABLE 3

ANEMOMETER DATA - 60 Ft Level of 30 Meter Tower

X= 545,944.89 Y= 431,158.70 H= 410.247 (BASE)

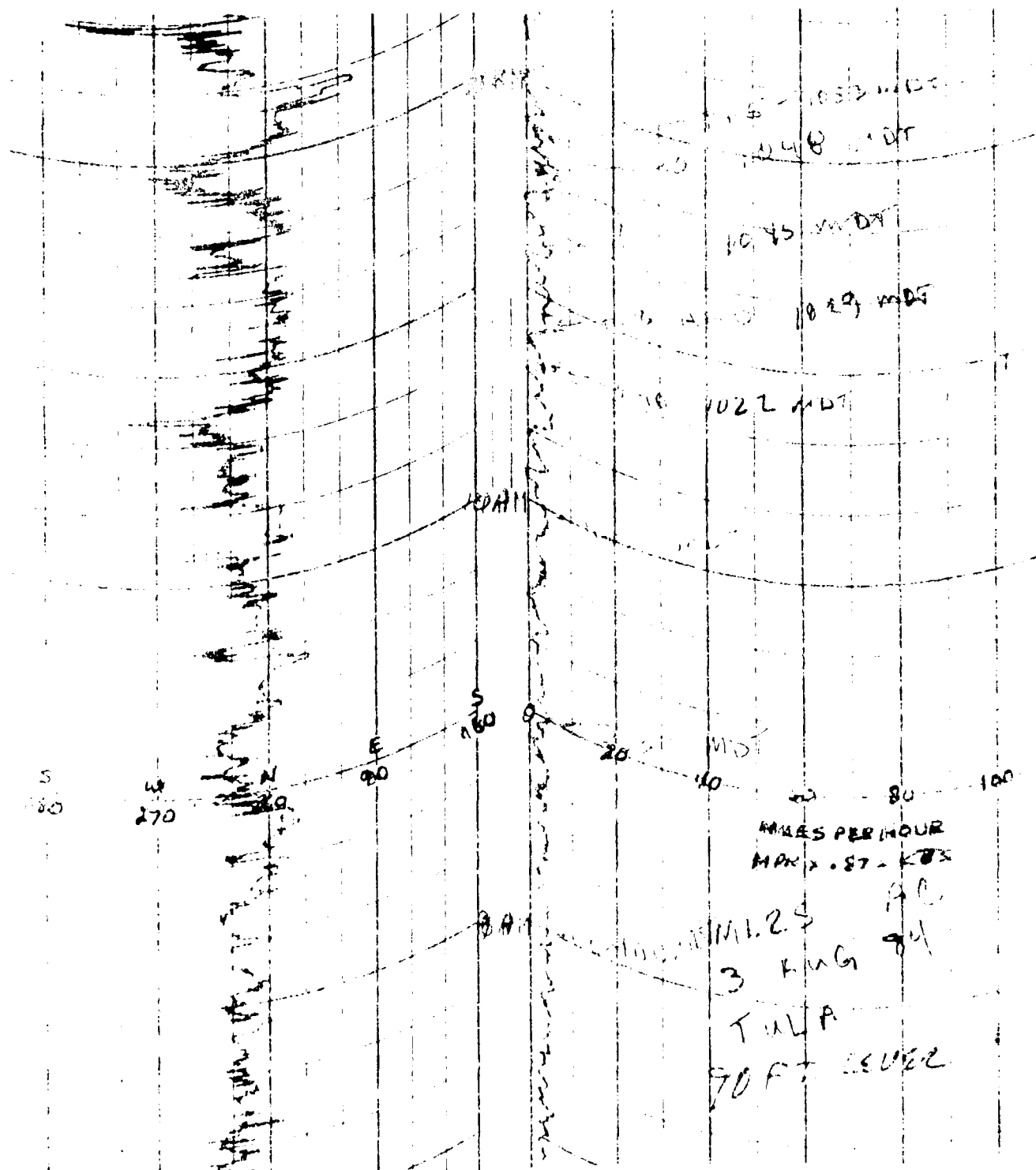


TABLE 4

ANEMOMETER DATA - 90 Ft Level of 30 Meter Tower
X= 545,944.89 Y= 431,158.70 H= 4102.47 (BASE)

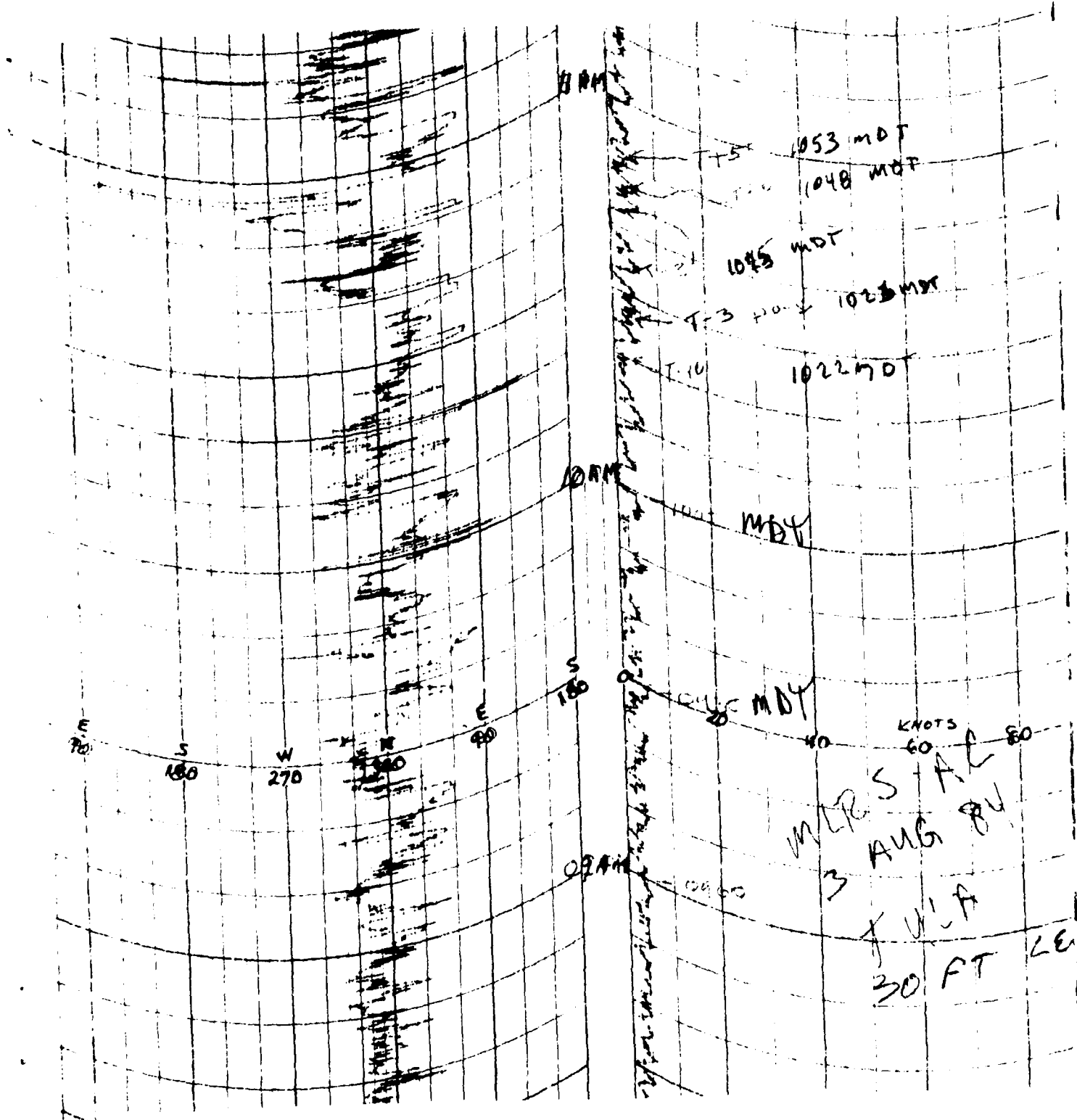


TABLE 5

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 3 August 1984

SITE: TULA GATE

TIME: 1048 MDT

WSTM COORDINATES:

X= 546,204.20

Y= 430,126.39

H= 4,108.59

SITE: DEADHORSE

TIME: 1048 MDT

WSTM COORDINATES:

X= 512,382.17

Y= 400,104.17

H= 4,133.12

LAYER MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS
SURFACE	020	05
150	360	05
210	340	04
270	340	04
330	340	04
390	340	03
450	340	03
510	320	01
570	320	02
630	340	03
690	360	05
750	020	06
810	010	10
870	030	11
930	030	11

LAYER MIDPOINT	DIRECTION	SPEED
METERS AGL	DEGREES	KNOTS
SURFACE	190	05
150	352	04
210	355	05
270	356	04
330	358	03
390	351	03
450	325	02
510	329	04
570	356	07
630	009	10
690	015	12
750	017	10
810	017	11
870	010	14
930	014	20

All data obtained from double theodolite tracked Pilot-Balloon observations.

TABLE 6

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

3 August 1984

RITA 0720 MDT

METCM1332062

031330128877

00160002 29360877
 01636007 29440867
 02075002 29470842
 03152001 29280804
 04605006 29030758
 05007013 28750715
 06008015 28440674
 07034011 28090634
 08070011 27670597
 09075014 27340561
 10073009 27030527
 11010008 26680494
 12631009 26230449
 13629012 25600393
 14583011 24910344
 15500011 24170299

SALT SOTIM 0720 MDT

METCM1331064

031330123881

00000000 29360881
 01550002 29400871
 02117005 29410846
 03639002 29240807
 04013006 29110761
 05009015 28840718
 06009016 28490676
 07016013 28140637
 08070011 27760599
 09090015 27430563
 10103012 27080529
 11033010 26730497
 12625013 26290451
 13008011 25640396
 14578011 24920346
 15490011 24170301

TULA GATE 0900 MDT

METCM1331062

031500125880

00622004 29820880
 01616004 29670870
 02627005 29510845
 03112002 29320807
 04623003 29070761
 05034014 28770717
 06025017 28430676
 07035013 28100636
 08039010 27780599
 09058009 27420563
 10066010 27150529
 11003007 26830496
 12624008 26380451
 13632009 25790396
 14003009 25070346
 15527010 24350302

RITA 0900 MDT

METCM1332062

031500128878

00480002 29840878
 01593003 29700867
 02613005 29460843
 03000000 29280805
 04030006 28950759
 05030013 28720715
 06039015 28380674
 07028010 27980634
 08050009 27610597
 09064010 27260561
 10048007 26980527
 11635007 26620494
 12633007 26190448
 13001010 25580393
 14604007 24820343
 15514012 24070299

SALT SOTIM 0900 MDT

METCM1331064

031500123881

00036003 29830881
 01616005 29620871
 02036003 29480846
 03000000 29330808
 04032005 29080762
 05027014 28830718
 06038019 28440677
 07044016 28080637
 08059010 27740600
 09077009 27400564
 10074008 27100529
 11631007 26760497
 12589010 26280451
 13626012 25650396
 14623007 24880346
 15524011 24170301

TULA GATE 1048 MDT

METCM1331062

031680125879

00622005 30090879
 01603011 29910869
 02615005 29670845
 03609001 29370806
 04032007 29050761
 05064012 28820717
 06047011 28460676
 07040010 28090636
 08050008 27730599
 09060010 27450563
 10056010 27110529
 11009009 26790496
 12633004 26400451
 13001007 25760396
 14617006 24950346
 15537008 24200301

RITA 1048 MDT

METCM1332062

031680128877

00160002 30130877
 01628002 29900867
 02008004 29640843
 03554003 29330805
 04056008 29040759
 05063010 28780716
 06030011 28400674
 07050010 28020635
 08054009 27660597
 09072011 27340561
 10041008 27030527
 11002009 26680495
 12630004 26310449
 13001007 25660394
 14586006 24910344
 15513008 24130300

SALT SOTIM 1048 MDT

METCM1331064

031680123881

00000000 30240881
 01005003 30010871
 02626004 29680846
 03007004 29400808
 04049008 29130762
 05052015 28820719
 06033015 28460677
 07027011 28110638
 08075007 27760600
 09088009 27410564
 10056008 27100530
 11021007 26770497
 12638007 26400452
 13629008 25700396
 14595005 24950346
 15507009 24170302

STATION ALTITUDE 1155.74 FEET MSL
 3 AUG. 54
 ASCENSION NO. 0720 MDT

STATIONING LEVEL DATA
 1155.74
 1155.74

GEODETIC COORDINATES
 33.18295 LAT DEG
 156.15114 LON DEG

TABLE 7

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
877.1	4180.7	18.0	15.9	92.0
867.2	4491.0	17.0	12.9	66.0
857.0	5076.0	20.0	13.6	66.0
846.3	5651.7	14.0	5.9	60.0
760.0	17512.0	11.0	3.4	65.0
644.3	17748.5	7.0	1.0	62.0
527.1	15815.0	0.0	0.0	65.0
411.1	12735.9	-0.0	-10.0	62.0
307.6	12316.2	-1.0	-11.0	51.0
202.4	10313.2	-3.0	-9.4	65.0
103.0	19165.0	-5.0	-6.9	92.0
111.0	19172.1	-6.4	-5.2	70.0
87.6	23124.4	-9.7	-7.1	81.0
70.4	17691.2	-10.4	-7.1	80.0
50.8	26543.1	-11.5	-7.0	85.0
40.0	27123.9	-12.0	-7.0	85.0
30.0	35123.7	-16.0	-23.0	74.0
20.0	46240.1	-17.0	-23.0	74.0
10.0	60411.1	-23.0	-28.0	50.0
8.0	69410.1	-25.0	-30.0	42.0
7.0	70417.0	-25.0	-30.0	50.0
6.0	80417.0	-26.0	-30.0	47.0
5.0	90417.0	-26.0	-30.0	47.0
4.0	100417.0	-26.0	-30.0	47.0
3.0	110417.0	-26.0	-30.0	47.0
2.0	120417.0	-26.0	-30.0	47.0
1.0	130417.0	-26.0	-30.0	47.0

STATION ALTITUDE 4140.74 FEET MSL
 1 AUG. 64
 ASCENSION NO. 11

UPPER AIR DATA
 1200120012
 RITA

GEODETTIC COORDINATES
 33.18295 LAT DEG
 106.15114 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	HUMID. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4150.7	877.1	18.9	92.0	1040.0	667.7	90.0	1.9	1.000318
4500.0	837.4	19.4	86.0	1026.2	668.5	82.3	1.9	1.000295
5000.0	800.3	19.9	75.0	1006.2	669.2	68.9	1.8	1.000292
5500.0	777.3	19.4	65.4	990.3	668.4	53.7	1.8	1.000296
6000.0	758.5	18.7	54.6	975.3	667.7	46.7	1.8	1.000280
6500.0	738.0	18.1	41.7	960.6	666.9	36.7	1.7	1.000273
7000.0	719.5	17.4	33.1	946.1	666.0	28.0	1.6	1.000267
7500.0	702.3	16.7	21.3	931.8	665.1	21.0	1.6	1.000261
8000.0	685.0	16.0	11.6	917.7	664.3	14.7	1.6	1.000255
8500.0	668.5	15.3	6.6	903.8	663.5	10.3	1.5	1.000250
9000.0	652.3	14.7	6.1	890.2	662.6	7.0	1.5	1.000244
9500.0	636.1	14.0	6.5	877.2	661.5	2.6	1.4	1.000240
10000.0	620.3	13.4	6.0	864.5	660.4	0.0	1.4	1.000236
10500.0	605.0	12.8	5.5	851.9	659.3	359.7	1.3	1.000232
11000.0	590.3	12.2	6.4	839.3	658.2	1.0	1.3	1.000227
11500.0	575.6	11.6	6.1	826.8	657.1	4.6	1.2	1.000222
12000.0	560.9	11.0	6.7	814.5	656.0	9.1	1.2	1.000217
12500.0	546.6	10.4	6.3	802.4	654.9	13.1	1.1	1.000212
13000.0	532.0	9.8	6.3	790.8	653.9	15.0	1.1	1.000207
13500.0	517.2	9.2	6.3	779.8	652.8	15.0	1.0	1.000203
14000.0	502.3	8.6	6.3	768.9	650.3	24.6	1.0	1.000198
14500.0	487.3	8.0	6.2	758.2	649.1	30.7	1.0	1.000194
15000.0	472.3	7.4	6.2	747.7	647.9	37.1	1.0	1.000190
15500.0	457.3	6.8	6.2	737.3	646.7	40.3	1.0	1.000186
16000.0	442.3	6.2	6.2	726.9	645.6	42.9	1.0	1.000183
16500.0	427.3	5.6	6.2	716.2	644.4	44.9	1.0	1.000179
17000.0	412.3	5.0	6.2	702.7	643.3	44.9	1.0	1.000175
17500.0	397.3	4.4	6.2	691.8	642.1	44.9	1.0	1.000171
18000.0	382.3	3.8	6.2	681.8	641.0	44.9	1.0	1.000167
18500.0	367.3	3.2	6.2	671.0	639.9	41.4	1.0	1.000163
19000.0	352.3	2.6	6.2	661.0	638.7	37.8	1.0	1.000159
19500.0	337.3	2.0	6.2	650.9	637.6	34.2	1.0	1.000156
20000.0	322.3	1.4	6.2	640.9	636.5	30.7	1.0	1.000152
20500.0	307.3	0.8	6.2	631.0	635.4	27.1	1.0	1.000148
21000.0	292.3	0.2	6.2	621.0	634.3	23.6	1.0	1.000144
21500.0	277.3	-0.4	6.2	611.0	633.2	20.1	1.0	1.000140
22000.0	262.3	-1.0	6.2	601.0	632.1	16.6	1.0	1.000136
22500.0	247.3	-1.6	6.2	591.0	631.0	13.1	1.0	1.000132
23000.0	232.3	-2.2	6.2	581.0	629.9	9.6	1.0	1.000128
23500.0	217.3	-2.8	6.2	571.0	628.8	6.1	1.0	1.000124
24000.0	202.3	-3.4	6.2	561.0	627.7	2.6	1.0	1.000120
24500.0	187.3	-4.0	6.2	551.0	626.6	0.0	1.0	1.000116
25000.0	172.3	-4.6	6.2	541.0	625.5	0.0	1.0	1.000112
25500.0	157.3	-5.2	6.2	531.0	624.4	0.0	1.0	1.000108
26000.0	142.3	-5.8	6.2	521.0	623.3	0.0	1.0	1.000104
26500.0	127.3	-6.4	6.2	511.0	622.2	0.0	1.0	1.000100
27000.0	112.3	-7.0	6.2	501.0	621.1	0.0	1.0	1.000096
27500.0	97.3	-7.6	6.2	491.0	620.0	0.0	1.0	1.000092
28000.0	82.3	-8.2	6.2	481.0	618.9	0.0	1.0	1.000088
28500.0	67.3	-8.8	6.2	471.0	617.8	0.0	1.0	1.000084
29000.0	52.3	-9.4	6.2	461.0	616.7	0.0	1.0	1.000080
29500.0	37.3	-10.0	6.2	451.0	615.6	0.0	1.0	1.000076
30000.0	22.3	-10.6	6.2	441.0	614.5	0.0	1.0	1.000072

STATION ALTITUDE 40-574 FEET
 3 AUG. 84
 ASCENSION NO. 1

GEOMETRIC COORDINATES
 15.15295 LAT DEG
 105.15114 LON DEG

TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN) SPEED KNOTS	INDEX OF REFRACTION
24000.0	915.7	-15.5	79.4	562.5	627.0	354.8	1.000134
24500.0	909.9	-15.4	77.1	551.3	625.9	351.3	1.000131
25000.0	904.1	-15.7	74.5	544.3	624.7	352.9	1.000129
25500.0	898.3	-15.9	74.0	535.8	623.6	354.7	1.000126
26000.0	892.5	-16.0	74.0	527.5	621.2	356.2	1.000124
26500.0	886.7	-16.3	72.4	519.0	620.6	357.8	1.000121
27000.0	880.9	-16.5	69.9	510.3	619.4	349.5	1.000119
27500.0	875.1	-16.7	69.5	501.8	618.2	347.1	1.000116
28000.0	869.3	-16.8	62.1	493.4	617.1	332.3	1.000114
28500.0	863.5	-16.9	59.2	485.2	615.9	327.2	1.000111
29000.0	857.7	-17.0	63.1	477.6	614.6	323.2	1.000110
29500.0	851.9	-17.2	65.2	470.2	612.8	318.9	1.000108
30000.0	846.1	-17.4	65.5	462.7	611.3	310.9	1.000106
30500.0	840.3	-17.7	65.0	455.4	609.7	302.1	1.000104
31000.0	834.5	-17.9	36.1	447.0	608.0	297.4	1.000101
31500.0	828.7	-18.0	35.5	439.4	607.7	292.9	1.000099
32000.0	822.9	-18.3	77.0	431.9	606.0	281.0	1.000097
32500.0	817.1	-18.3	41.7	425.1	604.1	280.5	1.000096
33000.0	811.3	-18.7	49.7	418.4	603.0	275.8	1.000094
33500.0	805.5	-18.9	53.5	411.9	601.2	269.0	1.000093
34000.0	800.0	-19.0	56.3	405.5	599.3	265.0	1.000091
34500.0	794.5	-19.1	61.0	399.2	597.4	259.0	1.000090
35000.0	788.8	-19.4	50.6**	392.8	595.4	251.8	1.000088
35500.0	783.3	-19.6	29.2**	386.8	593.9	241.8	1.000086
36000.0	777.7	-19.7	7.9**	379.9	591.3	231.8	1.000085

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

STATION ALTITUDE 4156.74 FEET ASL
3 AUG. 84
ASCENSION NO. 12

MANDATORY LEVELS
2100Z10012
RITA

GEODETIC COORDINATES
33.18295 LAT DEG
106.15114 LON DEG

TABLE 9

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
650.0	5073.	20.0	13.5	66.	55.9	1.5	
800.0	5765.	17.7	10.7	63.	92.1	.5	
750.0	8591.	15.7	7.7	61.	352.8	6.0	
700.0	10502.	11.8	5.4	55.	359.8	13.3	
650.0	14525.	8.2	1.7	63.	13.4	12.9	
600.0	14581.	3.1	-2.9	54.	35.7	11.7	
550.0	16977.	-1.1	-10.0	50.	44.9	16.8	
500.0	19451.	-6.2	-9.6	78.	10.0	7.6	
450.0	22131.	-11.0	-13.6	81.	350.8	9.0	
400.0	25072.	-16.5	-20.0	74.	353.3	11.8	
350.0	28323.	-23.1	-28.7	59.	328.9	11.2	
300.0	31967.	-31.0	-40.8	37.	281.0	10.9	
250.0	36107.	-42.5					

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

STATION ALTITUDE 4000.00 FEET MS
 3 AUG. 52
 ASCENSION NO. 1 0720 MDT

DISCREPANT DATA
 012 440001
 011 50114

GEOGRAPHIC COORDINATES
 73.12355 LAT DEG
 -26.11907 LONG DEG

TABLE 10

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE	REL. HUM.
MILLIBARS	FEET	ALP DEGREE	PERCENT
		DEGREES CENTIGRADE	
95.7	4023.4	15.0	94.0
92.5	4207.7	15.0	82.0
89.1	4391.2	15.0	75.0
85.0	4577.0	14.5	75.0
80.7	4751.5	13.7	74.0
76.7	4924.1	13.4	64.0
72.1	5097.5	13.0	57.0
68.1	5270.5	12.4	65.0
64.7	5443.5	11.6	62.0
60.7	5616.5	10.5	61.0
57.0	5789.2	9.8	71.0
53.4	5961.0	8.9	65.0
49.7	6132.7	8.1	59.0
46.0	6304.1	7.0	61.0
42.4	6475.8	-3.4	65.0
38.7	6647.4	-5.2	59.0
35.0	6818.9	-6.0	83.0
31.4	6990.2	-6.9	97.0
27.7	7161.7	-8.2	85.0
24.0	7334.1	-12.0	96.0
20.4	7505.0	-13.0	75.0
16.7	7677.0	-13.7	75.0
13.0	7848.2	-16.1	75.0
9.4	8019.3	-20.4	70.0
5.7	8190.5	-23.2	60.0
2.0	8361.4	-25.4	73.0
	8532.3	-28.5	36.0
	8703.1	-31.7	46.0
	8874.0	-33.6	45.0
	9044.8	-37.9	49.0
	9215.0	-42.2	

STATION ALTITUDE 4027.27 FEET MSL
3 AUG 64
ASCENSION NO. 1

UPPER AIR DATA
2103440001
SALT SOTIM

GEODETIC COORDINATES
33.12355 LAT DLG
106.35907 LON DLG

TABLE 11

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4027.4	580.7	16.0	17.0	94.0	1045.0	567.5	0.0	0.0	1.000320
4500.0	555.0	15.5	15.7	79.7	1025.1	568.3	40.4	1.2	1.000306
5000.0	530.9	15.1	14.6	75.0	1006.5	565.5	40.4	2.4	1.000298
5500.0	505.9	15.4	13.6	74.7	991.7	567.5	40.4	3.6	1.000292
6000.0	481.2	15.7	13.1	74.4	976.6	566.8	34.0	3.4	1.000285
6500.0	456.7	17.1	12.4	74.4	961.8	565.9	4.0	1.7	1.000279
7000.0	432.5	16.7	11.4	70.9	946.4	565.4	342.8	1.5	1.000274
7500.0	408.5	16.7	9.9	64.0	930.2	565.2	344.3	1.8	1.000262
8000.0	384.8	16.4	8.8	63.7	914.9	564.8	7.5	5.4	1.000255
8500.0	361.2	16.1	7.8	57.5	899.8	564.4	10.7	9.0	1.000248
9000.0	337.9	15.2	7.3	59.0	884.5	563.4	9.0	11.9	1.000244
9500.0	314.7	14.3	7.0	61.4	869.7	562.2	6.5	13.4	1.000241
10000.0	291.8	13.3	6.6	63.5	851.1	561.1	2.8	13.6	1.000237
10500.0	269.1	12.2	6.1	65.6	848.8	559.9	2.2	14.1	1.000233
11000.0	246.5	11.2	4.2	61.9	837.2	558.4	2.0	14.6	1.000225
11500.0	224.0	10.2	3.2	61.7	825.0	557.2	3.4	15.6	1.000220
12000.0	201.3	9.2	4.3	61.5	813.0	556.0	4.0	16.4	1.000215
12500.0	179.7	8.3	1.7	61.4	801.2	554.8	6.2	15.0	1.000211
13000.0	157.9	7.3	0.2	61.2	789.5	553.5	10.2	13.5	1.000206
13500.0	136.3	6.3	-0.7	61.0	778.1	552.4	19.0	12.0	1.000204
14000.0	114.6	5.1	-0.9	65.3	757.0	551.0	28.1	11.3	1.000199
14500.0	93.4	3.9	-1.1	70.0	736.2	549.5	35.6	11.3	1.000190
15000.0	72.3	2.9	-3.0	65.1	745.2	548.3	42.0	12.0	1.000190
15500.0	51.2	1.8	-3.3	69.0	734.1	547.0	47.0	13.1	1.000188
16000.0	30.4	1.0	-4.7	65.5	722.8	545.9	49.3	14.3	1.000183
16500.0	9.7	0.1	-6.1	62.5	711.6	544.3	51.1	15.4	1.000178
17000.0	-11.1	-0.9	-7.1	62.5	700.9	543.5	53.2	15.3	1.000175
17500.0	-32.7	-1.9	-7.9	63.7	590.3	542.3	55.2	14.4	1.000171
18000.0	-54.3	-3.0	-5.7	66.6	590.0	541.1	57.0	12.5	1.000168
18500.0	-75.9	-4.0	-5.5	72.2	620.1	539.5	51.0	10.4	1.000168
19000.0	-97.5	-5.7	-7.9	84.5	650.7	537.9	35.8	8.8	1.000165
19500.0	-119.1	-6.1	-7.7	88.4	649.1	537.4	43.0	8.9	1.000163
20000.0	-140.7	-7.2	-8.1	81.7	639.2	536.1	13.8	9.6	1.000160
20500.0	-162.3	-8.3	-5.9	95.0	622.4	534.5	6.0	10.2	1.000157
21000.0	-183.9	-9.4	-10.1	99.9	618.5	534.2	0.0	10.7	1.000150
21500.0	-205.5	-10.5	-11.1	95.7	608.5	533.1	750.2	11.2	1.000150
22000.0	-227.1	-11.6	-11.6	92.2	599.7	531.7	347.0	12.0	1.000147
22500.0	-248.7	-12.7	-12.5	85.8	590.2	530.2	346.1	13.2	1.000145
23000.0	-270.3	-13.8	-14.7	82.5	579.7	529.7	750.2	13.8	1.000140
23500.0	-291.9	-14.9	-16.5	75.5	570.2	528.7	758.5	14.6	1.000138

STATION ALTITUDE 2100445000
 2 AUG 64
 ASCENDING 00.

TEMPERATURE DATA
 2100445000
 SALT 5011M

GEOMETRIC COORDINATES
 73.1255 LAT DEG
 106.3507 LONG DEG

TABLE 11 CONT'D

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
2100445000	417.1	-16.1	75.1	551.3	527.3	5.0	12.5	1.000124
2100445000	431.7	-15.3	74.9	550.3	526.1	13.0	11.0	1.000131
2100445000	431.7	-15.1	74.7	549.3	524.9	10.7	11.0	1.000126
2100445000	431.7	-15.1	74.5	548.8	523.5	8.0	11.0	1.000126
2100445000	431.7	-15.1	75.0	526.5	522.1	157.7	17.0	1.000124
2100445000	431.7	-15.1	75.2	518.3	520.7	150.1	11.0	1.000121
2100445000	431.7	-15.1	75.1	510.1	519.3	143.0	12.6	1.000114
2100445000	431.7	-15.1	75.1	501.7	518.0	131.0	12.9	1.000116
2100445000	431.7	-15.1	75.1	493.5	516.8	131.0	11.0	1.000114
2100445000	431.7	-15.1	75.1	485.4	515.6	127.5	12.1	1.000112
2100445000	431.7	-15.1	75.1	477.6	514.0	123.0	10.0	1.000110
2100445000	431.7	-15.1	75.0	469.9	512.5	113.1	9.1	1.000108
2100445000	431.7	-15.1	75.1	462.1	511.0	105.7	9.1	1.000105
2100445000	431.7	-15.1	75.1	454.3	510.0	239.7	10.0	1.000103
2100445000	431.7	-15.1	75.0	446.8	508.5	212.4	11.0	1.000101
2100445000	431.7	-15.1	75.1	439.7	507.0	279.1	11.0	1.000098
2100445000	431.7	-15.1	75.1	432.2	505.4	274.1	11.0	1.000096
2100445000	431.7	-15.1	75.1	426.0	503.6	273.1	11.0	1.000093
2100445000	431.7	-15.1	75.1	419.0	502.1	268.7	12.0	1.000091
2100445000	431.7	-15.1	75.1	411.2	500.7	263.7	12.0	1.000088
2100445000	431.7	-15.1	75.1	404.9	500.2	259.0	12.0	1.000086
2100445000	431.7	-15.1	75.1	398.2	500.2	256.0	11.0	1.000084
2100445000	431.7	-15.1	75.1	391.7	500.0	256.0	11.0	1.000082
2100445000	431.7	-15.1	75.1	385.3	500.0	256.0	11.0	1.000081
2100445000	431.7	-15.1	75.1	379.0	500.0	256.0	11.0	1.000080

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

STATION ALTITUDE 673.37 FEET MSL
 3 AUG. 84
 ASCENSION NO. 1 0720 MDT

MANDATORY LEVELS
 235040001
 SALT 501M

TABLE 12

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT	PERCENT	DIRECTION DEGREES(TM)	SPEED KNOTS	
950.0	5726.	19.0	14.5	75.	40.4	2.4	
800.0	5732.	16.3	12.1	74.	342.5	1.5	
750.0	5539.	16.1	7.7	57.	10.1	9.2	
700.0	10455.	12.4	6.2	66.	2.1	14.0	
650.0	12432.	8.3	1.3	61.	6.1	15.0	
600.0	14637.	3.5	-1.4	70.	37.8	11.4	
550.0	16739.	-0.8	-7.0	63.	53.4	15.3	
500.0	19414.	-6.0	-7.7	98.	24.3	8.8	
450.0	22099.	-11.1	-11.9	93.	343.8	12.3	
400.0	25042.	-16.3	-19.8	74.	10.1	11.3	
350.0	28294.	-23.4	-27.4	69.	328.7	12.6	
300.0	31935.	-31.7	-39.4	46.	276.7	11.6	
250.0	35074.	-42.2					

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

GEODETIC COORDINATES
 33.07436 LAT DEG
 106.18294 LON DEG

STATION ALTITUDE 4117.2 FEET MSL
 200803JUL
 DATA SITE

0900 MDT

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE METERS	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
422.2	4117.2	20.9	17.5	75.9
421.3	4095.0	20.9	17.3	75.9
420.0	4075.0	20.0	16.1	65.0
420.0	4050.0	19.0	15.4	53.0
420.0	4025.0	18.9	5.0	65.0
421.8	4000.0	19.0	5.0	65.0
424.8	3975.0	19.0	5.0	73.1
428.0	3950.0	19.0	5.0	66.0
434.4	3925.0	19.0	5.0	75.0
437.1	3900.0	19.0	5.0	53.0
440.0	3875.0	19.0	5.0	49.0
440.0	3850.0	19.0	5.0	73.1
440.0	3825.0	19.0	5.0	84.0
440.0	3800.0	19.0	5.0	75.0
440.0	3775.0	19.0	5.0	53.0
440.0	3750.0	19.0	5.0	53.0
440.0	3725.0	19.0	5.0	53.0
440.0	3700.0	19.0	5.0	53.0
440.0	3675.0	19.0	5.0	53.0
440.0	3650.0	19.0	5.0	53.0
440.0	3625.0	19.0	5.0	53.0
440.0	3600.0	19.0	5.0	53.0
440.0	3575.0	19.0	5.0	53.0
440.0	3550.0	19.0	5.0	53.0
440.0	3525.0	19.0	5.0	53.0
440.0	3500.0	19.0	5.0	53.0
440.0	3475.0	19.0	5.0	53.0
440.0	3450.0	19.0	5.0	53.0
440.0	3425.0	19.0	5.0	53.0
440.0	3400.0	19.0	5.0	53.0
440.0	3375.0	19.0	5.0	53.0
440.0	3350.0	19.0	5.0	53.0
440.0	3325.0	19.0	5.0	53.0
440.0	3300.0	19.0	5.0	53.0
440.0	3275.0	19.0	5.0	53.0
440.0	3250.0	19.0	5.0	53.0
440.0	3225.0	19.0	5.0	53.0
440.0	3200.0	19.0	5.0	53.0
440.0	3175.0	19.0	5.0	53.0
440.0	3150.0	19.0	5.0	53.0
440.0	3125.0	19.0	5.0	53.0
440.0	3100.0	19.0	5.0	53.0
440.0	3075.0	19.0	5.0	53.0
440.0	3050.0	19.0	5.0	53.0
440.0	3025.0	19.0	5.0	53.0
440.0	3000.0	19.0	5.0	53.0
440.0	2975.0	19.0	5.0	53.0
440.0	2950.0	19.0	5.0	53.0
440.0	2925.0	19.0	5.0	53.0
440.0	2900.0	19.0	5.0	53.0
440.0	2875.0	19.0	5.0	53.0
440.0	2850.0	19.0	5.0	53.0
440.0	2825.0	19.0	5.0	53.0
440.0	2800.0	19.0	5.0	53.0
440.0	2775.0	19.0	5.0	53.0
440.0	2750.0	19.0	5.0	53.0
440.0	2725.0	19.0	5.0	53.0
440.0	2700.0	19.0	5.0	53.0
440.0	2675.0	19.0	5.0	53.0
440.0	2650.0	19.0	5.0	53.0
440.0	2625.0	19.0	5.0	53.0
440.0	2600.0	19.0	5.0	53.0
440.0	2575.0	19.0	5.0	53.0
440.0	2550.0	19.0	5.0	53.0
440.0	2525.0	19.0	5.0	53.0
440.0	2500.0	19.0	5.0	53.0
440.0	2475.0	19.0	5.0	53.0
440.0	2450.0	19.0	5.0	53.0
440.0	2425.0	19.0	5.0	53.0
440.0	2400.0	19.0	5.0	53.0
440.0	2375.0	19.0	5.0	53.0
440.0	2350.0	19.0	5.0	53.0
440.0	2325.0	19.0	5.0	53.0
440.0	2300.0	19.0	5.0	53.0
440.0	2275.0	19.0	5.0	53.0
440.0	2250.0	19.0	5.0	53.0
440.0	2225.0	19.0	5.0	53.0
440.0	2200.0	19.0	5.0	53.0
440.0	2175.0	19.0	5.0	53.0
440.0	2150.0	19.0	5.0	53.0
440.0	2125.0	19.0	5.0	53.0
440.0	2100.0	19.0	5.0	53.0
440.0	2075.0	19.0	5.0	53.0
440.0	2050.0	19.0	5.0	53.0
440.0	2025.0	19.0	5.0	53.0
440.0	2000.0	19.0	5.0	53.0
440.0	1975.0	19.0	5.0	53.0
440.0	1950.0	19.0	5.0	53.0
440.0	1925.0	19.0	5.0	53.0
440.0	1900.0	19.0	5.0	53.0
440.0	1875.0	19.0	5.0	53.0
440.0	1850.0	19.0	5.0	53.0
440.0	1825.0	19.0	5.0	53.0
440.0	1800.0	19.0	5.0	53.0
440.0	1775.0	19.0	5.0	53.0
440.0	1750.0	19.0	5.0	53.0
440.0	1725.0	19.0	5.0	53.0
440.0	1700.0	19.0	5.0	53.0
440.0	1675.0	19.0	5.0	53.0
440.0	1650.0	19.0	5.0	53.0
440.0	1625.0	19.0	5.0	53.0
440.0	1600.0	19.0	5.0	53.0
440.0	1575.0	19.0	5.0	53.0
440.0	1550.0	19.0	5.0	53.0
440.0	1525.0	19.0	5.0	53.0
440.0	1500.0	19.0	5.0	53.0
440.0	1475.0	19.0	5.0	53.0
440.0	1450.0	19.0	5.0	53.0
440.0	1425.0	19.0	5.0	53.0
440.0	1400.0	19.0	5.0	53.0
440.0	1375.0	19.0	5.0	53.0
440.0	1350.0	19.0	5.0	53.0
440.0	1325.0	19.0	5.0	53.0
440.0	1300.0	19.0	5.0	53.0
440.0	1275.0	19.0	5.0	53.0
440.0	1250.0	19.0	5.0	53.0
440.0	1225.0	19.0	5.0	53.0
440.0	1200.0	19.0	5.0	53.0
440.0	1175.0	19.0	5.0	53.0
440.0	1150.0	19.0	5.0	53.0
440.0	1125.0	19.0	5.0	53.0
440.0	1100.0	19.0	5.0	53.0
440.0	1075.0	19.0	5.0	53.0
440.0	1050.0	19.0	5.0	53.0
440.0	1025.0	19.0	5.0	53.0
440.0	1000.0	19.0	5.0	53.0
440.0	975.0	19.0	5.0	53.0
440.0	950.0	19.0	5.0	53.0
440.0	925.0	19.0	5.0	53.0
440.0	900.0	19.0	5.0	53.0
440.0	875.0	19.0	5.0	53.0
440.0	850.0	19.0	5.0	53.0
440.0	825.0	19.0	5.0	53.0
440.0	800.0	19.0	5.0	53.0
440.0	775.0	19.0	5.0	53.0
440.0	750.0	19.0	5.0	53.0
440.0	725.0	19.0	5.0	53.0
440.0	700.0	19.0	5.0	53.0
440.0	675.0	19.0	5.0	53.0
440.0	650.0	19.0	5.0	53.0
440.0	625.0	19.0	5.0	53.0
440.0	600.0	19.0	5.0	53.0
440.0	575.0	19.0	5.0	53.0
440.0	550.0	19.0	5.0	53.0
440.0	525.0	19.0	5.0	53.0
440.0	500.0	19.0	5.0	53.0
440.0	475.0	19.0	5.0	53.0
440.0	450.0	19.0	5.0	53.0
440.0	425.0	19.0	5.0	53.0
440.0	400.0	19.0	5.0	53.0
440.0	375.0	19.0	5.0	53.0
440.0	350.0	19.0	5.0	53.0
440.0	325.0	19.0	5.0	53.0
440.0	300.0	19.0	5.0	53.0
440.0	275.0	19.0	5.0	53.0
440.0	250.0	19.0	5.0	53.0
440.0	225.0	19.0	5.0	53.0
440.0	200.0	19.0	5.0	53.0
440.0	175.0	19.0	5.0	53.0
440.0	150.0	19.0	5.0	53.0
440.0	125.0	19.0	5.0	53.0
440.0	100.0	19.0	5.0	53.0
440.0	75.0	19.0	5.0	53.0
440.0	50.0	19.0	5.0	53.0
440.0	25.0	19.0	5.0	53.0
440.0	0.0	19.0	5.0	53.0

STANDARD COORDINATES
33.07436 147.926
106.15296 104.066

0900 M37

[illegible][illegible]

TABLE 14 Cont'd

FEDERAL COORDINATES
 100-246141 DEC
 100-246142 JAN DEC

[illegible]

STATION ALTITUDE 4112.7, FEET MSL
 3 AUG. 54 0900 MDT
 ASCENSION NO. 4

GEODETIC COORDINATES
 13.07436 LAT DLG
 106.15294 LONG DEG

LABORATORY LEVEL
 2150230034
 TULA SITE

TABLE 15

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
300.0	5091.	20.0	49.	350.0	3.0
300.0	5085.	17.0	55.	350.7	1.9
750.0	3612.	15.2	54.	13.7	0.5
700.0	10522.	11.9	55.	14.6	14.9
550.0	12547.	7.8	70.	15.9	15.4
500.0	14701.	7.4	70.	21.4	5.5
450.0	17004.	-1.0	71.	37.4	9.1
400.0	19406.	-5.3	78.	3.5	6.0
350.0	22150.	-10.0	49.	300.1	9.9
300.0	25130.	-14.4	54.	350.6	8.5
250.0	28404.	-22.2	74.	13.6	9.3
200.0	31070.	-30.0	31.	288.0	9.5
150.0	35243.	-40.1			

STATION ALTITUDE -134.74 FEET MSL
 2 AUG. 82
 ASCENSION NO. 15 0900 MDT

GEODETIC COORDINATES
 33.16295 LAT DEG
 106.15114 LON DEG

TABLE 16

SIGNIFICANT LEVEL DATA			
2100210015			
RITA			
PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE	
		AIR DEGREES	DEWPOINT CENTIGRADE
27.7	415.7	22.5	18.3
28.2	425.7	20.5	15.8
28.6	435.9	19.6	14.0
29.0	447.5	18.3	12.1
29.4	459.5	17.5	10.5
29.8	471.7	16.0	9.1
30.2	483.7	14.9	7.8
30.6	495.8	13.8	6.5
31.0	507.8	12.8	5.1
31.4	519.8	11.8	3.8
31.8	531.8	10.8	2.5
32.2	543.8	9.8	1.2
32.6	555.8	8.8	0.0
33.0	567.8	7.8	-1.2
33.4	579.8	6.8	-2.5
33.8	591.8	5.8	-3.8
34.2	603.8	4.8	-5.1
34.6	615.8	3.8	-6.5
35.0	627.8	2.8	-7.8
35.4	639.8	1.8	-9.1
35.8	651.8	0.8	-10.5
36.2	663.8	-0.2	-11.8
36.6	675.8	-1.2	-13.2
37.0	687.8	-2.2	-14.5
37.4	699.8	-3.2	-15.8
37.8	711.8	-4.2	-17.2
38.2	723.8	-5.2	-18.5
38.6	735.8	-6.2	-19.8
39.0	747.8	-7.2	-21.2
39.4	759.8	-8.2	-22.5
39.8	771.8	-9.2	-23.8
40.2	783.8	-10.2	-25.2
40.6	795.8	-11.2	-26.5
41.0	807.8	-12.2	-27.8
41.4	819.8	-13.2	-29.2
41.8	831.8	-14.2	-30.5
42.2	843.8	-15.2	-31.8
42.6	855.8	-16.2	-33.2
43.0	867.8	-17.2	-34.5
43.4	879.8	-18.2	-35.8
43.8	891.8	-19.2	-37.2
44.2	903.8	-20.2	-38.5
44.6	915.8	-21.2	-39.8
45.0	927.8	-22.2	-41.2
45.4	939.8	-23.2	-42.5
45.8	951.8	-24.2	-43.8
46.2	963.8	-25.2	-45.2
46.6	975.8	-26.2	-46.5
47.0	987.8	-27.2	-47.8
47.4	999.8	-28.2	-49.2
47.8	1011.8	-29.2	-50.5
48.2	1023.8	-30.2	-51.8
48.6	1035.8	-31.2	-53.2
49.0	1047.8	-32.2	-54.5
49.4	1059.8	-33.2	-55.8
49.8	1071.8	-34.2	-57.2
50.2	1083.8	-35.2	-58.5
50.6	1095.8	-36.2	-59.8
51.0	1107.8	-37.2	-61.2
51.4	1119.8	-38.2	-62.5
51.8	1131.8	-39.2	-63.8
52.2	1143.8	-40.2	-65.2
52.6	1155.8	-41.2	-66.5
53.0	1167.8	-42.2	-67.8
53.4	1179.8	-43.2	-69.2
53.8	1191.8	-44.2	-70.5
54.2	1203.8	-45.2	-71.8
54.6	1215.8	-46.2	-73.2
55.0	1227.8	-47.2	-74.5
55.4	1239.8	-48.2	-75.8
55.8	1251.8	-49.2	-77.2
56.2	1263.8	-50.2	-78.5
56.6	1275.8	-51.2	-79.8
57.0	1287.8	-52.2	-81.2
57.4	1299.8	-53.2	-82.5
57.8	1311.8	-54.2	-83.8
58.2	1323.8	-55.2	-85.2
58.6	1335.8	-56.2	-86.5
59.0	1347.8	-57.2	-87.8
59.4	1359.8	-58.2	-89.2
59.8	1371.8	-59.2	-90.5
60.2	1383.8	-60.2	-91.8
60.6	1395.8	-61.2	-93.2
61.0	1407.8	-62.2	-94.5
61.4	1419.8	-63.2	-95.8
61.8	1431.8	-64.2	-97.2
62.2	1443.8	-65.2	-98.5
62.6	1455.8	-66.2	-99.8
63.0	1467.8	-67.2	-101.2
63.4	1479.8	-68.2	-102.5
63.8	1491.8	-69.2	-103.8
64.2	1503.8	-70.2	-105.2
64.6	1515.8	-71.2	-106.5
65.0	1527.8	-72.2	-107.8
65.4	1539.8	-73.2	-109.2
65.8	1551.8	-74.2	-110.5
66.2	1563.8	-75.2	-111.8
66.6	1575.8	-76.2	-113.2
67.0	1587.8	-77.2	-114.5
67.4	1599.8	-78.2	-115.8
67.8	1611.8	-79.2	-117.2
68.2	1623.8	-80.2	-118.5
68.6	1635.8	-81.2	-119.8
69.0	1647.8	-82.2	-121.2
69.4	1659.8	-83.2	-122.5
69.8	1671.8	-84.2	-123.8
70.2	1683.8	-85.2	-125.2
70.6	1695.8	-86.2	-126.5
71.0	1707.8	-87.2	-127.8
71.4	1719.8	-88.2	-129.2
71.8	1731.8	-89.2	-130.5
72.2	1743.8	-90.2	-131.8
72.6	1755.8	-91.2	-133.2
73.0	1767.8	-92.2	-134.5
73.4	1779.8	-93.2	-135.8
73.8	1791.8	-94.2	-137.2
74.2	1803.8	-95.2	-138.5
74.6	1815.8	-96.2	-139.8
75.0	1827.8	-97.2	-141.2
75.4	1839.8	-98.2	-142.5
75.8	1851.8	-99.2	-143.8
76.2	1863.8	-100.2	-145.2
76.6	1875.8	-101.2	-146.5
77.0	1887.8	-102.2	-147.8
77.4	1899.8	-103.2	-149.2
77.8	1911.8	-104.2	-150.5
78.2	1923.8	-105.2	-151.8
78.6	1935.8	-106.2	-153.2
79.0	1947.8	-107.2	-154.5
79.4	1959.8	-108.2	-155.8
79.8	1971.8	-109.2	-157.2
80.2	1983.8	-110.2	-158.5
80.6	1995.8	-111.2	-159.8
81.0	2007.8	-112.2	-161.2
81.4	2019.8	-113.2	-162.5
81.8	2031.8	-114.2	-163.8
82.2	2043.8	-115.2	-165.2
82.6	2055.8	-116.2	-166.5
83.0	2067.8	-117.2	-167.8
83.4	2079.8	-118.2	-169.2
83.8	2091.8	-119.2	-170.5
84.2	2103.8	-120.2	-171.8
84.6	2115.8	-121.2	-173.2
85.0	2127.8	-122.2	-174.5
85.4	2139.8	-123.2	-175.8
85.8	2151.8	-124.2	-177.2
86.2	2163.8	-125.2	-178.5
86.6	2175.8	-126.2	-179.8
87.0	2187.8	-127.2	-181.2
87.4	2199.8	-128.2	-182.5
87.8	2211.8	-129.2	-183.8
88.2	2223.8	-130.2	-185.2
88.6	2235.8	-131.2	-186.5
89.0	2247.8	-132.2	-187.8
89.4	2259.8	-133.2	-189.2
89.8	2271.8	-134.2	-190.5
90.2	2283.8	-135.2	-191.8
90.6	2295.8	-136.2	-193.2
91.0	2307.8	-137.2	-194.5
91.4	2319.8	-138.2	-195.8
91.8	2331.8	-139.2	-197.2
92.2	2343.8	-140.2	-198.5
92.6	2355.8	-141.2	-199.8
93.0	2367.8	-142.2	-201.2
93.4	2379.8	-143.2	-202.5
93.8	2391.8	-144.2	-203.8
94.2	2403.8	-145.2	-205.2
94.6	2415.8	-146.2	-206.5
95.0	2427.8	-147.2	-207.8
95.4	2439.8	-148.2	-209.2
95.8	2451.8	-149.2	-210.5
96.2	2463.8	-150.2	-211.8
96.6	2475.8	-151.2	-213.2
97.0	2487.8	-152.2	-214.5
97.4	2499.8	-153.2	-215.8
97.8	2511.8	-154.2	-217.2
98.2	2523.8	-155.2	-218.5
98.6	2535.8	-156.2	-219.8
99.0	2547.8	-157.2	-221.2
99.4	2559.8	-158.2	-222.5
99.8	2571.8	-159.2	-223.8
REL-HUM. PERCENT			
77.0			77.0
75.0			75.0
70.0			70.0
67.0			67.0
66.0			66.0
60.0			60.0
65.0			65.0
68.0			68.0
77.0			77.0
70.0			70.0
90.0			90.0
99.2			99.2
98.1			98.1
72.0			72.0
65.0			65.0
99.0			99.0
91.0			91.0
62.0			62.0
73.0			73.0
70.0			70.0
34.0			34.0
11.0			11.0
45.0			45.0
60.0			60.0
52.0			52.0

GEODETIC COORDINATES
13.18295 LAT DEG
106.15114 LON DEG

WIND DATA
1000 FT
1000 FT

STATION ALTITUDE 4155.74 FEET MSL
3 AUG. 74
ASCENSION NO. 10 0900 MDT

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES AIR DEGREE CENTIGRADE	TEMPERATURE DEWPOINT DEGREE CENTIGRADE	HUMIDITY PERCENT	DENSITY GRAMS/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4155.7	877.5	22.5	15.3	77.5	1024.5	672.9	270.0	1.0	1.000320
4500.0	857.9	21.4	17.0	76.0	1017.9	671.5	260.8	1.0	1.000316
5000.0	852.1	19.8	14.5	71.5	1004.5	669.3	322.1	1.5	1.000298
5500.0	837.9	19.2	13.4	69.1	991.4	668.5	350.2	2.0	1.000289
6000.0	823.1	18.6	12.8	68.1	975.8	667.9	35.7	2.7	1.000283
6500.0	808.3	18.7	12.1	67.0	950.4	667.3	31.8	1.5	1.000277
7000.0	794.5	17.8	10.9	66.7	927.5	665.9	72.7	1.3	1.000270
7500.0	780.5	16.0	9.7	66.3	934.8	664.4	35.1	2.3	1.000263
8000.0	765.7	14.8	8.6	66.0	922.3	663.0	21.3	4.3	1.000257
8500.0	753.0	14.5	7.7	63.9	907.2	662.5	15.7	7.3	1.000251
9000.0	739.0	14.2	6.9	61.7	892.2	662.0	14.2	9.8	1.000245
9500.0	725.4	13.7	6.2	60.5	878.0	661.4	14.0	11.7	1.000239
10000.0	713.4	12.6	5.6	62.7	865.7	660.1	15.3	17.0	1.000235
10500.0	700.5	11.5	5.1	64.9	853.5	658.8	16.9	13.9	1.000231
11000.0	687.9	10.5	4.4	65.9	841.1	657.4	18.9	14.1	1.000227
11500.0	675.5	9.5	3.7	66.8	828.8	656.4	20.8	14.1	1.000222
12000.0	663.2	8.5	2.9	67.8	816.7	655.2	21.2	13.0	1.000216
12500.0	651.1	7.7	2.3	70.4	805.2	653.8	20.4	11.8	1.000214
13000.0	639.2	6.0	1.7	73.5	794.3	652.3	17.0	10.4	1.000211
13500.0	627.5	4.8	1.0	76.6	783.3	650.8	17.1	9.8	1.000207
14000.0	615.9	3.8	0.4	74.1	771.8	649.5	15.9	9.5	1.000201
14500.0	604.4	2.9	-1.9	70.0	760.2	648.4	24.4	9.5	1.000196
15000.0	593.2	1.7	-3.2	74.9	749.2	647.0	28.9	9.4	1.000193
15500.0	582.0	0.8	-2.3	87.5	738.4	645.5	31.2	9.1	1.000191
16000.0	571.2	-0.2	-3.5	87.5	727.9	644.1	33.9	9.4	1.000188
16500.0	560.4	-1.5	-4.1	82.2	716.5	643.1	36.5	10.2	1.000183
17000.0	549.6	-2.6	-5.8	69.4	704.6	642.3	36.8	10.3	1.000176
17500.0	539.4	-3.6	-7.1	60.7	693.1	641.5	35.2	9.6	1.000170
18000.0	529.1	-3.7	-8.5	69.3	682.4	640.3	25.6	7.9	1.000159
18500.0	518.0	-4.7	-9.0	77.9	672.0	639.0	15.7	6.3	1.000167
19000.0	507.1	-5.8	-7.7	86.5	661.7	637.8	7.9	6.6	1.000160
19500.0	496.3	-7.0	-11.0	72.9	652.2	636.2	35.0	6.9	1.000159
20000.0	485.3	-8.1	-10.0	85.5	642.0	635.0	35.0	7.3	1.000158
20500.0	475.0	-9.1	-9.5	95.7	632.1	633.8	34.2	7.4	1.000157
21000.0	465.5	-10.1	-10.3	96.0	622.1	632.6	34.7	7.3	1.000154
21500.0	456.1	-11.2	-11.2	95.5	611.4	631.3	35.4	7.2	1.000150
22000.0	446.6	-12.2	-12.2	93.1	600.9	631.1	35.5	7.2	1.000147
22500.0	437.3	-13.1	-13.1	91.1	590.7	630.2	35.1	7.3	1.000144
23000.0	428.0	-14.1	-14.1	91.0	581.3	629.0	34.1	7.7	1.000141
23500.0	418.7	-15.1	-15.1	90.3	572.0	627.5	33.2	8.5	1.000132

STATION ALTITUDE 615.74 FEET MSL
 3 AUG. 54
 ASCENSION NO. 17 0900 MDT

GEODETIC COORDINATES
 33.18395 LAT DEG
 106.15114 LON DEG

OPEN AIR DATA
 1100210013
 RITA

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	419.0	-14.7	81.4	552.5	626.9	358.6	9.1	1.000134
24500.0	409.0	-15.5	72.5	553.2	625.7	357.1	9.8	1.000131
25000.0	401.5	-16.1	63.7	544.1	624.5	357.3	10.2	1.000127
25500.0	393.4	-17.0	64.5	535.5	623.5	358.5	10.7	1.000125
26000.0	385.0	-18.2	67.7	527.1	621.8	7	11.0	1.000123
26500.0	377.7	-19.6	70.5	518.9	620.4	5.4	10.5	1.000121
27000.0	370.1	-20.9	72.9	510.7	619.0	7.7	9.8	1.000119
27500.0	362.5	-22.1	72.3	502.6	617.5	7.3	9.2	1.000116
28000.0	355.0	-23.3	71.8	494.6	616.0	358.0	8.9	1.000114
28500.0	347.7	-24.5	71.3	486.8	614.5	347.0	8.1	1.000112
29000.0	340.5	-25.7	70.5	479.0	613.1	332.5	7.2	1.000110
29500.0	333.2	-26.8	70.3	471.5	611.5	317.3	6.2	1.000108
30000.0	326.0	-27.9	59.9	463.8	610.2	304.9	6.7	1.000106
30500.0	319.7	-28.9	37.5	456.0	608.9	297.1	8.2	1.000103
31000.0	313.0	-30.2	34.1	448.7	607.3	290.8	10.1	1.000101
31500.0	306.0	-31.1	39.6	440.9	606.2	288.0	12.0	1.000099
32000.0	299.0	-32.0	45.1	433.2	605.0	287.3	13.2	1.000098
32500.0	292.4	-33.2	48.8	426.2	603.4	289.4	13.1	1.000096
33000.0	287.1	-34.6	52.6	419.3	601.7	290.3	12.3	1.000095
33500.0	281.0	-36.0	56.4	412.6	600.1	284.6	11.6	1.000093
34000.0	274.9	-37.3	59.7	405.9	598.4	276.9	12.1	1.000091
34500.0	268.9	-38.7	53.3	398.5	596.5	266.9	13.5	1.000090
35000.0	263.0	-40.0	38.5**	391.0	594.5			1.000088
35500.0	257.2	-41.3	21.6**	384.5	593.2			1.000086
36000.0	251.3	-42.6	4.6**	380.1	591.5			1.000085

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

STATION ALTITUDE 4136.74 FEET MSL
 3 AUG. 64
 ASCENSION NO. 13 0900 MDT

MANDATORY LEVELS
 2150213013
 RITA

GEODETTIC COORDINATES
 33.18295 LAT DEG
 106.15114 LON DEG

TABLE 18

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
		AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5091.	19.6	14.0	70.	328.4	1.5	
800.0	5804.	17.6	11.4	67.	71.2	1.1	
750.0	9605.	14.4	7.6	63.	14.6	8.0	
700.0	10514.	11.4	5.1	65.	17.0	13.9	
650.0	12535.	7.2	2.2	71.	20.1	11.7	
600.0	14580.	2.5	-2.2	71.	26.5	9.5	
550.0	16970.	-2.0	-6.8	70.	36.8	10.1	
500.0	19439.	-6.9	-11.1	72.	.9	6.9	
450.0	22115.	-11.5	-12.5	92.	1.1	7.2	
400.0	25053.	-16.5	-22.0	62.	357.3	10.3	
350.0	28300.	-24.1	-27.8	71.	351.0	8.5	
300.0	31929.	-32.0	-39.9	65.	287.2	13.2	
250.0	36058.	-43.0					

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

STATION ALTITUDE 4723.27 FEET MSL
 3 AUG. 64
 ASCENSION NO. 2 0900 MDT

SIGNIFICANT LEVEL DATA
 2150440002
 SALT 5011M

GEODETTIC COORDINATES
 33.12355 LAT DEG
 106.75907 LON DEG

TABLE 19

PRESSURE MILLIBARS	GLOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
		AIR	DEWPOINT	
951.0	4023.4	22.9	15.2	65.0
977.9	4124.2	21.1	15.2	69.0
950.0	5043.1	19.6	15.3	91.0
847.2	5143.3	18.6	15.0	85.0
940.1	5375.0	19.5	13.4	68.0
809.5	6424.6	18.4	11.9	66.0
779.5	7495.0	17.1	9.5	61.0
759.7	8208.9	15.7	8.4	62.0
740.3	8931.1	15.1	8.3	64.0
700.0	10494.7	12.4	5.6	63.0
652.5	12406.9	7.2	1.7	65.0
637.2	13049.3	6.8	1.3	68.0
581.4	15504.9	1.6	-3.9	47.0
565.6	16197.2	.1	-6.2	73.0
541.3	17389.0	-1.4	-3.6	58.0
524.7	18203.0	-3.4	-9.4	63.0
500.0	19452.9	-5.8	-9.7	74.0
497.8	19566.6	-6.2	-12.7	60.0
484.2	20278.8	-7.3	-9.4	85.0
473.9	20829.3	-8.7	-10.9	84.0
445.4	22403.4	-11.8	-12.3	95.0
430.2	23278.3	-12.4	-15.9	69.0
400.0	25097.2	-15.9	-21.1	64.0
364.4	26078.7	-18.9	-23.5	67.0
345.1	28693.7	-24.7	-23.7	69.0
336.5	29296.5	-26.4	-29.9	72.0
330.1	29753.0	-27.0	-34.2	50.0
317.2	30696.8	-28.3	-39.5	33.0
300.0	32004.1	-31.8	-32.7	50.0
286.2	33094.3	-34.5	-42.6	43.0
268.8	34527.4	-36.1	-44.6	50.0
250.0	36156.9	-42.3		

UPPER AIR DATA 21044000Z SALT 501M

GEOMETRIC COORDINATES
33.12355 LAT DEG
106.35907 LON DEG

TABLE 20

STATION ELEVATION 40 7.25 FEET 100
3 AUG. 62
ASCENSION No. 0900 MD

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS DECILES CENTIGADE	TEMPERATURE AIR DEGREE F CENTIGADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION FLORES(TN)	INDEX OF REFRACTION
4029.0	531.0	20.9	65.0	1028.5	673.0	20.7	1.000339
4500.0	555.4	20.5	73.9	1019.9	670.2	21.3	1.000306
5000.0	581.7	19.7	80.4	1004.5	659.4	22.8	1.000305
5500.0	615.4	19.4	87.3	989.2	658.5	24.4	1.000286
6000.0	651.7	19.4	85.5	973.8	657.9	24.3	1.000282
6500.0	687.3	18.3	85.5	959.7	657.3	14.6	1.000275
7000.0	723.1	17.7	83.3	944.2	656.4	350.7	1.000268
7500.0	759.2	17.1	81.0	929.9	655.5	3.7	1.000261
8000.0	795.4	16.1	81.7	916.6	654.4	12.3	1.000256
8500.0	831.7	15.5	82.5	902.4	653.7	16.1	1.000251
9000.0	868.0	15.0	84.5	887.9	653.1	16.6	1.000248
9500.0	904.3	14.1	83.5	874.9	652.1	16.6	1.000242
10000.0	940.7	13.2	83.3	862.0	651.0	17.6	1.000237
10500.0	977.1	12.3	83.5	849.4	650.9	18.2	1.000231
11000.0	1013.5	11.0	84.5	838.2	650.2	20.2	1.000226
11500.0	1050.0	9.7	85.5	827.2	650.5	21.7	1.000222
12000.0	1086.4	8.3	86.7	816.7	650.9	22.4	1.000217
12500.0	1122.8	7.1	88.0	804.9	653.5	23.5	1.000213
13000.0	1159.2	6.0	88.0	791.1	653.2	24.5	1.000209
13500.0	1195.6	5.8	87.5	779.4	652.0	26.2	1.000204
14000.0	1232.0	5.7	87.5	768.1	650.6	29.2	1.000200
14500.0	1268.4	5.7	87.2	756.9	649.3	32.5	1.000195
15000.0	1304.8	5.6	87.0	745.9	648.0	35.2	1.000191
15500.0	1341.2	5.5	87.0	735.1	646.7	38.6	1.000187
16000.0	1377.6	5.4	87.1	724.2	645.4	41.6	1.000184
16500.0	1414.0	5.3	87.1	712.8	644.4	44.2	1.000180
17000.0	1450.4	5.2	87.2	701.3	643.5	46.6	1.000175
17500.0	1486.8	5.1	87.2	690.1	642.5	44.2	1.000170
18000.0	1523.2	5.0	87.3	680.2	641.1	40.2	1.000167
18500.0	1559.6	4.9	87.3	669.9	639.9	31.0	1.000165
19000.0	1596.0	4.8	87.3	659.4	638.7	19.2	1.000163
19500.0	1632.4	4.7	87.3	649.4	637.4	3.1	1.000159
20000.0	1668.8	4.6	87.3	639.0	636.4	14.6	1.000157
20500.0	1705.2	4.5	87.3	628.9	635.2	13.4	1.000156
21000.0	1741.6	4.4	87.3	619.4	633.9	12.6	1.000152
21500.0	1778.0	4.3	87.3	609.8	632.6	12.2	1.000150
22000.0	1814.4	4.2	87.3	600.1	631.4	12.6	1.000147
22500.0	1850.8	4.1	87.3	590.6	630.1	13.1	1.000144
23000.0	1887.2	4.0	87.3	580.8	628.8	13.5	1.000139
23500.0	1923.6	3.9	87.3	570.9	627.5	13.9	1.000136

STATION ALTITUDE 9500 MSL
 2 AUG 64
 ASCENSION IS.

GEOMETRIC COORDINATES
 33.12355 LAT DEC
 106.15907 LONG DEC

GEOMETRIC ALTITUDE MSL FEET	PRESSURE	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. %	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	DIRECTION DEGREES (M)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4500.0	10.0	10.0	65.0	1.228.5	623.0	30.1	2.9	1.000339
4500.0	10.0	10.0	72.0	1.219.0	620.2	21.0	2.9	1.000356
5000.0	9.0	10.0	50.0	1.204.5	609.4	22.0	2.9	1.000305
5000.0	9.0	10.0	67.0	1.209.2	608.5	27.0	2.7	1.000286
4000.0	12.0	10.0	65.0	1.221.0	607.9	26.0	2.1	1.000280
5000.0	10.0	10.0	65.0	1.208.7	607.3	14.0	2.7	1.000275
7000.0	7.0	10.0	43.0	1.244.0	600.0	150.0	5.0	1.000268
7500.0	6.0	10.0	41.0	1.249.0	605.6	3.0	1.0	1.000261
5000.0	10.0	10.0	41.0	1.216.0	604.6	12.0	4.1	1.000250
5000.0	10.0	10.0	42.0	1.202.6	603.7	15.0	7.7	1.000251
4000.0	12.0	10.0	69.0	1.207.0	603.1	16.0	19.3	1.000248
4000.0	12.0	10.0	63.0	1.214.0	602.1	16.0	12.4	1.000242
4000.0	12.0	10.0	63.0	1.210.0	601.0	17.0	14.4	1.000237
4000.0	12.0	10.0	63.0	1.209.0	600.9	18.0	16.3	1.000231
4000.0	12.0	10.0	64.0	1.208.0	600.2	17.0	17.0	1.000226
4000.0	12.0	10.0	65.0	1.207.0	600.5	17.0	19.0	1.000222
4000.0	12.0	10.0	66.0	1.206.0	600.9	12.4	12.4	1.000217
4000.0	12.0	10.0	66.0	1.205.0	600.5	12.0	12.0	1.000213
4000.0	12.0	10.0	68.0	1.204.0	600.2	24.0	16.0	1.000209
4000.0	12.0	10.0	67.0	1.203.0	600.2	16.0	14.0	1.000200
4000.0	12.0	10.0	67.0	1.202.0	600.3	20.0	12.0	1.000200
4000.0	12.0	10.0	67.0	1.201.0	600.3	20.0	10.0	1.000195
4000.0	12.0	10.0	67.0	1.200.0	600.0	35.0	9.1	1.000191
4000.0	12.0	10.0	67.0	1.200.0	600.0	38.0	8.0	1.000182
4000.0	12.0	10.0	67.0	1.200.0	600.0	41.0	9.1	1.000180
4000.0	12.0	10.0	67.0	1.200.0	600.0	44.0	9.0	1.000180
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	9.0	1.000175
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000170
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000167
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	7.0	1.000165
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	7.0	1.000163
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	7.0	1.000161
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	7.0	1.000159
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	7.0	1.000157
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000156
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000150
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000150
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000147
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	8.0	1.000144
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	10.0	1.000139
4000.0	12.0	10.0	67.0	1.200.0	600.0	46.0	10.0	1.000136

GEODETIC COORDINATES
33.12355 LAT DEG
106.35907 LON DEG

UPPER AIR DATA
210440002
SALT SCIM

STATION ALTITUDE 4023.22 FEET MSL
3 AUG. 64 0900 MDT
ASCENSION NO. 2

TABLE 20 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	418.0	-13.8	67.0	550.7	627.8	343.8	14.6	1.000133
24500.0	409.7	-14.5	65.5	551.7	626.5	346.5	13.8	1.000110
25000.0	401.5	-15.7	64.3	542.8	625.6	349.8	13.0	1.000128
25500.0	393.5	-17.1	65.2	534.0	623.7	351.9	12.1	1.000125
26000.0	385.5	-18.7	65.8	527.4	621.8	356.3	11.4	1.000123
26500.0	377.8	-19.8	67.3	519.1	620.3	2.4	10.8	1.000121
27000.0	370.1	-20.9	67.7	510.8	618.9	7.7	10.1	1.000118
27500.0	362.5	-22.1	69.1	502.5	617.5	12.7	9.3	1.000116
28000.0	355.1	-23.2	69.5	494.5	616.2	13.1	8.2	1.000114
28500.0	347.9	-24.3	69.9	486.6	614.8	8.3	5.8	1.000112
29000.0	340.7	-25.6	70.5	479.1	613.2	349.6	5.5	1.000110
29500.0	333.6	-26.7	62.2	471.3	611.8	324.4	6.2	1.000108
30000.0	326.7	-27.3	45.6	462.8	610.9	308.7	9.2	1.000105
30500.0	319.8	-28.0	36.5	454.4	610.0	303.8	9.9	1.000103
31000.0	313.1	-29.1	36.9	446.9	608.7	300.5	11.0	1.000101
31500.0	306.5	-30.5	43.4	439.9	607.0	297.9	11.3	1.000099
32000.0	300.1	-31.6	49.9	432.0	605.3	294.9	11.1	1.000096
32500.0	293.6	-33.0	45.8	425.9	603.8	291.6	10.8	1.000096
33000.0	287.4	-34.3	43.6	419.0	602.2	284.0	10.4	1.000094
33500.0	281.2	-35.5	45.0	412.1	600.6	276.5	10.4	1.000093
34000.0	275.1	-36.5	47.4	405.3	599.0	271.8	10.8	1.000091
34500.0	269.1	-38.0	49.9	398.7	597.6	267.9	11.3	1.000090
35000.0	263.2	-39.3	35.5**	392.1	595.8	265.2	12.1	1.000088
35500.0	257.4	-40.3	20.2**	385.6	594.1			1.000086
36000.0	251.8	-41.9	4.5**	379.2	592.4			1.000085

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

STATION ALTITUDE 405.17 FEET MSL
 3 AUG. 61
 ASCENSION NO. 0900 MDT

WIND DATA
 AT 0400Z
 CAL 301M
 TABLE 21

GEODETIC COORDINATES
 33.12355 LAT DEG
 106.35907 LON DEG

PRESSURE EQUIVALENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
550.0	3240.	12.6	15.3	81.	20.9	2.8	
500.0	3757.	15.0	11.2	64.	275.7	.2	
750.0	8551.	15.4	8.4	53.	15.3	8.1	
700.0	10475.	17.4	5.6	53.	15.9	15.2	
550.0	12498.	7.1	1.6	58.	23.5	17.9	
500.0	14650.	3.4	-2.1	67.	33.3	13.0	
550.0	15949.	-9	-7.0	55.	65.4	9.8	
500.0	17425.	-5.8	-9.7	74.	3.9	7.7	
450.0	22111.	-11.3	-12.1	94.	327.7	9.0	
400.0	25356.	-15.9	-21.1	64.	349.7	12.8	
350.0	28304.	-23.9	-28.0	59.	32.7	7.4	
300.0	31941.	-31.8	-38.7	50.	295.0	11.1	
250.0	36079.	-42.3					

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

UDDETIC COORDINATES
 33.07436 LAT DEG
 106.19294 LON DEG

SIGNIFICANT LEVEL DATA
 215047005
 TULA SITE

STATION ALTITUDE 6112.77 FEET MSL
 3 AUG. 94
 ASCENSION NO. 1048 MDT

TABLE 22

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE		REL. HUM. PERCENT
		WILLIAMS MSL FEET	AIN DEWPOINT DEGREES CENTIGRADE	
879.0	6112.8	25.5	17.0	60.0
872.1	6346.8	23.8	16.8	57.0
850.0	5092.0	21.9	16.5	63.0
821.9	5042.4	19.7	11.2	58.0
791.1	4222.9	15.7	3.0	65.0
700.0	10528.9	12.8	4.8	58.0
655.2	11885.0	9.0	3.4	68.0
583.8	15442.9	2.0	-3.9	65.0
577.6	15726.5	1.5	-4.0	56.0
557.6	16559.3	.3	-5.9	63.0
543.0	17357.8	-1.1	-9.9	51.0
509.0	19044.2	-4.6	-8.7	74.0
500.0	19395.7	-5.5	-11.0	65.0
476.3	20755.2	-7.7	-9.9	84.0
452.5	22054.7	-9.3	-14.5	66.0
437.1	22943.9	-10.7	-17.5	57.0
400.0	25171.7	-14.9	-23.0	50.0
361.2	27545.6	-21.2	-26.5	62.0
329.6	29953.8	-26.5	-39.1	29.0
300.0	32598.6	-31.4	-32.8	43.0
274.8	34124.0	-36.3	-43.5	47.0
265.6	34915.6	-38.5	-46.6	53.0
250.0	36259.0	-41.9		

STATION ALTITUDE 4112.75 FEET M L
2 AUG. 74
ASCENSION NO. 1048 MDT

GEOPH. AIR DATA
0103470000
TOTA SITE

GEODETIC COORDINATES
33.07436 LAT DEG
106.18294 LON DEG

TABLE 23

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE WET-POINT CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4112.5	879.1	25.0	17.0	60.0	1017.7	675.5	190.0	5.1	1.000309
4500.0	867.8	24.4	16.2	58.2	1011.5	673.4	199.5	4.9	1.000296
5000.0	851.5	22.1	14.5	62.3	998.4	671.9	198.7	3.7	1.000295
5500.0	837.4	20.7	12.1	60.0	955.4	670.4	147.0	2.9	1.000286
6000.0	823.1	19.8	11.4	58.2	972.7	668.9	145.1	2.1	1.000276
6500.0	808.6	18.9	10.5	58.4	958.9	667.7	133.5	1.8	1.000270
7000.0	794.3	17.9	9.8	59.7	945.2	666.6	130.7	2.1	1.000265
7500.0	780.3	17.0	9.0	59.3	931.7	665.5	11.0	1.6	1.000259
8000.0	766.6	16.1	8.2	59.8	918.4	664.3	17.1	6.2	1.000254
8500.0	753.0	15.3	7.6	59.7	904.6	663.4	23.9	9.3	1.000249
9000.0	739.6	14.7	6.9	59.3	890.5	662.7	28.0	11.1	1.000244
9500.0	726.4	14.1	6.2	58.9	876.7	661.9	30.8	12.0	1.000239
10000.0	713.4	13.5	5.5	58.5	863.0	661.1	35.7	11.5	1.000234
10500.0	700.7	12.9	4.8	58.0	849.6	660.4	36.0	11.0	1.000229
11000.0	688.1	11.5	4.0	61.5	838.3	658.8	33.7	11.0	1.000226
11500.0	675.7	10.7	3.5	65.1	827.3	657.1	26.8	11.1	1.000222
12000.0	663.4	9.8	3.0	67.7	816.2	655.6	23.0	10.9	1.000219
12500.0	651.2	7.6	2.2	67.5	804.2	654.3	24.4	10.5	1.000213
13000.0	639.2	6.9	1.1	67.1	792.3	653.1	25.9	10.1	1.000209
13500.0	627.0	5.6	1.1	66.6	780.6	651.9	26.4	9.7	1.000204
14000.0	615.9	4.1	0.9	65.2	769.2	650.7	25.8	9.4	1.000196
14500.0	604.6	2.9	-1.9	65.0	757.8	649.5	24.6	9.4	1.000191
15000.0	593.3	2.9	-3.0	65.4	746.7	648.3	21.2	9.0	1.000191
15500.0	581.9	2.0	-4.7	63.2	735.5	647.1	21.8	9.4	1.000186
16000.0	571.7	1.4	-5.0	58.1	723.6	646.3	27.4	6.5	1.000181
16500.0	561.0	0.0	-5.9	61.7	712.1	645.4	26.1	9.6	1.000179
17000.0	550.9	-1.4	-6.7	57.1	701.3	644.2	47.8	9.0	1.000172
17500.0	540.0	-1.6	-7.7	52.9	690.9	642.9	44.1	8.0	1.000167
18000.0	529.3	-3.3	-7.8	59.0	680.5	641.6	34.1	6.7	1.000167
18500.0	518.7	-5.0	-8.3	60.6	670.2	640.3	14.0	8.3	1.000162
19000.0	508.4	-6.7	-8.7	73.4	660.1	639.0	11.7	8.3	1.000159
19500.0	497.1	-8.3	-11.0	65.1	649.6	638.0	7.7	8.0	1.000157
20000.0	486.0	-9.9	-10.5	72.5	639.1	637.0	34.5	5.4	1.000155
20500.0	475.0	-12.0	-10.1	80.1	628.8	636.0	145.1	5.7	1.000152
21000.0	464.1	-13.7	-10.0	90.6	618.5	635.1	152.0	6.0	1.000150
21500.0	453.4	-15.3	-10.4	73.0	608.0	634.2	16.0	2.5	1.000149
22000.0	443.1	-17.0	-14.0	65.7	597.8	633.4	16.2	2.7	1.000141
22500.0	432.9	-18.3	-14.0	61.5	588.0	632.5	18.4	1.7	1.000137
23000.0	422.9	-19.6	-14.7	50.8	578.4	631.6	23.1	4.6	1.000134
23500.0	412.9	-21.0	-15.9	55.1	569.1	630.0	23.1	4.6	1.000134

STATION ALTITUDE 4112.79 FEET MSL
3 AUG. 64
ASCENSION NO. 6

UPPER AIR DATA
2100Z0000S
TOLA SITE

GEODETIC COORDINATES
33.07436 LAT DEG
106.18294 LON DEG

TABLE 23 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	419.1	-12.7	53.7	559.9	629.1	3.7	5.1	1.000132
24500.0	410.5	-13.6	52.1	550.9	627.9	8.1	5.5	1.000129
25000.0	402.7	-14.6	50.5	542.1	626.7	10.5	6.2	1.000126
25500.0	394.7	-15.6	51.7	523.8	625.3	14.8	7.2	1.000124
26000.0	386.8	-17.1	54.6	525.7	623.7	15.2	8.1	1.000122
26500.0	379.0	-18.4	55.7	517.9	622.0	12.1	8.7	1.000120
27000.0	371.4	-19.5	59.2	510.1	620.4	7.1	9.0	1.000118
27500.0	363.9	-21.1	61.5	502.5	618.3	8.9	8.9	1.000116
28000.0	356.4	-22.2	55.5	494.5	617.3	354.9	8.3	1.000114
28500.0	349.1	-23.3	48.9	486.5	615.9	344.9	7.4	1.000111
29000.0	341.9	-24.4	42.1	478.5	614.5	328.5	6.6	1.000109
29500.0	334.9	-25.5	35.2	470.9	613.2	316.4	6.6	1.000107
30000.0	328.0	-26.6	29.3	463.3	611.9	315.2	7.4	1.000104
30500.0	321.1	-27.7	32.5	455.7	610.4	317.3	8.6	1.000103
31000.0	314.3	-28.9	35.8	448.2	608.9	316.5	9.9	1.000101
31500.0	307.7	-30.0	39.1	440.8	607.5	315.0	9.9	1.000099
32000.0	301.3	-31.2	42.4	433.6	606.1	311.6	8.2	1.000098
32500.0	294.5	-32.6	43.8	426.5	604.6	295.6	6.9	1.000096
33000.0	288.5	-33.5	44.8	419.4	603.1	270.8	7.6	1.000094
33500.0	282.3	-34.5	45.5	412.5	601.5	262.9	10.8	1.000093
34000.0	276.3	-36.0	46.5	405.8	600.0	258.5	13.2	1.000091
34500.0	270.3	-37.3	49.9	399.2	598.3	256.4	14.5	1.000090
35000.0	264.4	-38.7	49.7**	392.8	596.5	253.0	14.2	1.000088
35500.0	258.5	-40.0	29.9**	386.3	594.9			1.000086
36000.0	252.9	-41.2	10.2**	379.9	593.3			1.000085

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

STATION ALTITUDE 110.75 FEET MSL
2 AUG. 54
ASCENSION NO. 1048 MOT

WIND VELOCITY LEVELS
10000 FT
5000 FT
2000 FT

GEODETIC COORDINATES
33.07436 LAT DEG
106.18294 LON DEG

TABLE 24

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	5779.	21.9	14.5	63.	349.6	3.5	
800.0	5790.	15.5	10.1	59.	335.4	1.7	
750.0	5407.	15.2	7.4	60.	25.2	9.7	
700.0	10519.	12.5	4.8	58.	35.8	11.2	
650.0	12545.	7.7	2.1	67.	24.6	10.4	
600.0	14497.	3.5	-2.4	66.	24.0	9.4	
550.0	17000.	-4	-7.9	57.	47.4	10.0	
500.0	19479.	-5.5	-11.0	55.	7.4	8.6	
450.0	22172.	-9.5	-14.9	55.	10.2	6.5	
400.0	25130.	-14.9	-23.0	50.	10.2	6.5	
350.0	28392.	-21.0	-30.7	50.	346.9	7.5	
300.0	32035.	-31.4	-39.8	43.	310.8	7.8	
250.0	36150.	-41.0					

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

STATION ALTITUDE 4155.74 FEET MSL
3 AUG. 54
ASCENSION NO. 14 1048 MDT

GEOMETRIC COORDINATES
23.18295 LAT DEG
106.15114 LON DEG

STATION ALTITUDE 4155.74 FEET MSL
3 AUG. 54
ASCENSION NO. 14 1048 MDT

TABLE 25

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT
977.7	25.5	63.0
977.2	23.3	56.0
953.0	21.9	62.0
915.2	15.5	74.0
901.9	15.5	60.0
755.4	15.7	59.0
715.8	15.4	52.0
700.0	11.2	60.0
636.7	3.5	63.0
544.8	1.7	54.0
530.2	-1.5	59.0
542.3	-1.3	50.0
500.0	-6.3	67.0
479.4	-8.6	81.0
460.2	-9.7	72.0
452.4	-9.7	59.0
400.0	-15.6	55.0
395.3	-16.8	52.0
364.1	-21.2	58.0
332.8	-26.0	30.0
300.0	-31.7	44.0
294.2	-33.0	43.0
287.3	-38.4	55.0
250.0	-42.5	

0000116 COORDINATES
33.18295 LAT DEG
106.15114 LONG DEG

STATISTICAL BUREAU
1 AUGUST 1964
ASST. DIR. FOR

100

[illegible]

STATION ALTITUDE 4185.74 FEET MSL
 2 AUG. 64
 ASCENSION NO. 14

JOHN AIN DATA
 150010014
 RITA

GEODETIC COORDINATES
 73.18295 LAT DEG
 106.15114 LON DEG

TABLE 26 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REF. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	WET BULB POINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
24000.0	415.6	-13.6	-20.2	55.5	560.9	528.2	3.9	5.6	1.000132
24500.0	410.6	-14.6	-21.2	55.5	551.9	527.3	2.5	6.4	1.000129
25000.0	406.3	-15.3	-22.2	55.3	543.1	525.8	2.5	7.2	1.000127
25500.0	396.3	-15.9	-24.4	52.2	535.7	523.8	3.8	7.8	1.000124
26000.0	386.3	-15.0	-25.1	53.7	527.1	522.5	3.8	7.8	1.000122
26500.0	375.5	-19.1	-25.8	55.2	518.7	521.2	2.3	7.7	1.000120
27000.0	370.9	-20.2	-26.6	56.7	510.4	519.8	1.4	7.4	1.000118
27500.0	353.6	-21.3	-27.4	57.4	502.3	518.5	2.7	6.9	1.000116
28000.0	355.9	-22.4	-29.5	50.9	494.2	517.1	349.2	5.7	1.000113
28500.0	345.6	-23.5	-32.2	44.4	486.3	515.7	329.6	5.5	1.000111
29000.0	341.6	-24.6	-34.8	35.0	478.4	514.3	315.5	6.2	1.000108
29500.0	336.4	-25.7	-37.6	31.5	470.7	512.9	314.8	6.8	1.000106
30000.0	327.4	-26.9	-38.5	32.2	463.1	511.4	310.3	8.0	1.000104
30500.0	320.5	-28.1	-38.7	35.1	455.5	510.0	306.1	9.2	1.000103
31000.0	312.8	-29.2	-39.0	37.9	448.1	508.5	301.9	9.8	1.000101
31500.0	307.2	-30.4	-39.4	40.5	440.8	507.1	300.2	8.9	1.000099
32000.0	300.5	-31.6	-39.8	43.7	433.5	505.6	296.2	7.8	1.000098
32500.0	294.4	-33.0	-41.2	43.0	426.9	503.8	287.0	6.8	1.000096
33000.0	288.0	-34.2	-41.8	45.7	419.8	502.3	269.0	7.4	1.000095
33500.0	281.8	-35.4	-42.4	45.4	412.9	500.7	257.7	9.5	1.000093
34000.0	275.7	-36.7	-43.0	51.1	406.1	509.2	253.8	11.6	1.000091
34500.0	269.5	-37.9	-43.7	53.5	399.4	507.5	252.7	12.9	1.000090
35000.0	263.9	-39.2	-46.7	44.6**	392.9	505.9	252.5	13.0	1.000088
35500.0	258.1	-40.5	-56.5	26.1**	386.6	504.1			1.000086
36000.0	252.6	-42.0	-63.2	7.8**	380.4	502.3			1.000085

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

STATION ALTITUDE 4154.74 FEET MSL
3 AUG. 54
ASCENSION NO. 14

GEODETIC COORDINATES
33.18295 LAT DEG
106.15114 LON DEG

VARIABLE LEVELS
1500-10016
4174
TABLE 27

PRESSURE	GEOPOTENTIAL	TEMPERATURE	REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DE-POINT DEGREES CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5031.	21.7	62.	19.2	1.9
800.0	4820.	18.4	60.	325.0	3.0
750.0	4610.	15.6	55.	34.3	6.7
700.0	4399.	11.8	60.	28.4	9.6
650.0	4188.	7.5	62.	19.5	11.0
600.0	3977.	7.0	60.	29.7	9.5
550.0	3766.	-1.5	59.	43.8	9.5
500.0	3555.	-6.3	67.	6.0	9.0
450.0	3344.	-10.0	59.	6.9	2.4
400.0	3133.	-15.6	55.	2.9	7.6
350.0	2922.	-23.3	46.	354.0	5.5
300.0	2711.	-31.7	44.	295.5	7.7
250.0	2500.	-42.6			

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

STATION ALTITUDE 403.0 FEET MSL
 3 AUG. 54
 ASCENSION NO. 1048 MDT

TEMPERATURE LEVEL DATA
 1048000Z
 1048000Z

GEOGRAPHIC COORDINATES
 23.12355 LAT DEG
 106.35907 LON DEG

TABLE 28

PRESSURE WILLIAMS MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
403.0	25.8	56.0
403.0	25.1	51.0
403.0	22.1	37.0
403.0	22.1	37.0
403.0	20.3	62.0
403.0	19.2	57.0
403.0	18.2	51.0
403.0	15.2	59.0
403.0	12.3	61.0
403.0	9.7	59.0
403.0	4.1	70.0
403.0	1.7	61.0
403.0	1.3	66.0
403.0	-0.2	51.0
403.0	-1.4	76.0
403.0	-5.1	66.0
403.0	-5.6	75.0
403.0	-7.0	75.0
403.0	-8.5	74.0
403.0	-8.5	49.0
403.0	-9.0	45.0
403.0	-10.1	50.0
403.0	-16.0	47.0
403.0	-18.1	57.0
403.0	-21.0	59.0
403.0	-23.9	39.0
403.0	-24.7	28.0
403.0	-26.0	35.0
403.0	-31.4	44.0
403.0	-35.9	45.0
403.0	-37.9	41.0
403.0	-41.7	

STATION ALTITUDE 6061.72 FEET MSL
3 AUG 54
ASCENSION NO. 3

GEOMETRIC COORDINATES

106.35907 LON DEG
3.12355 LAT DEG

1048 MDT

TABLE 29

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY CYCLOGR. WATER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4500.0	530.7	24.3	54.0	1014.5	677.5	0.0	0.0	1.000306
4500.0	555.3	24.1	53.7	1008.1	674.0	354.0	1.1	1.000293
4500.0	581.2	22.2	56.7	997.1	671.9	354.0	2.2	1.000286
5500.0	535.5	23.4	61.7	956.0	669.7	354.0	3.3	1.000285
6000.0	521.9	19.5	58.7	971.1	668.9	357.5	3.8	1.000277
6500.0	507.1	19.2	56.6	956.6	668.1	1.1	4.0	1.000269
7000.0	493.3	15.4	55.5	942.5	667.1	12.2	5.2	1.000263
7500.0	479.2	12.9	55.0	928.7	666.1	15.9	6.5	1.000257
8000.0	465.1	10.8	54.2	915.0	665.1	23.4	8.0	1.000251
8500.0	451.0	8.0	53.4	901.6	664.1	28.9	9.9	1.000245
9000.0	436.8	5.2	53.5	888.4	663.1	31.7	11.9	1.000240
9500.0	422.6	2.4	52.5	875.5	662.0	32.1	13.7	1.000236
10000.0	408.4	0.0	52.3	862.8	660.9	28.1	14.7	1.000233
10500.0	394.2	-2.3	49.0	850.3	659.7	23.4	15.3	1.000229
11000.0	379.9	-5.1	54.9	838.7	658.2	20.9	14.0	1.000224
11500.0	365.7	-7.9	43.9	827.2	656.8	15.1	14.3	1.000219
12000.0	351.5	-10.7	62.7	815.1	655.5	15.0	17.7	1.000215
12500.0	337.3	-13.5	62.4	803.0	654.4	12.1	12.7	1.000210
13000.0	323.1	-16.3	60.0	791.0	653.3	14.6	11.3	1.000205
13500.0	308.9	-19.1	59.7	779.3	652.1	22.6	6.9	1.000201
14000.0	294.7	-21.9	59.4	767.8	651.0	32.5	9.9	1.000197
14500.0	280.5	-24.7	58.0	756.4	649.8	39.9	7.0	1.000193
15000.0	266.3	-27.5	66.9	746.1	648.2	43.0	6.7	1.000190
15500.0	252.1	-30.3	47.9	735.5	646.7	46.4	6.4	1.000187
16000.0	237.9	-33.1	61.9	723.5	645.9	49.4	6.8	1.000184
16500.0	223.7	-35.9	65.3	713.7	644.4	51.0	8.0	1.000179
17000.0	209.5	-38.7	58.3	701.9	643.5	48.4	9.1	1.000173
17500.0	195.3	-41.5	52.9	690.7	642.5	51.0	7.1	1.000169
18000.0	181.1	-44.3	60.4	680.2	641.3	32.5	7.7	1.000167
18500.0	166.9	-47.1	67.9	670.0	640.0	27.1	7.3	1.000166
19000.0	152.7	-49.9	75.4	659.9	638.7	17.9	7.4	1.000164
19500.0	138.5	-52.7	69.5	649.1	637.2	15.7	7.4	1.000164
20000.0	124.3	-55.5	74.5	639.7	636.3	4.1	7.1	1.000167
20500.0	110.1	-58.3	79.5	629.4	635.2	2.7	6.5	1.000154
21000.0	95.9	-61.1	74.5	619.6	634.6	259.7	6.4	1.000151
21500.0	81.7	-63.9	65.7	607.8	633.9	353.3	6.2	1.000147
22000.0	67.5	-66.7	50.3	595.5	634.2	459.3	7.7	1.000141
22500.0	53.3	-69.5	48.3	583.1	632.6	569.1	7.0	1.000136
23000.0	39.1	-72.3	44.4	570.8	631.4	679.1	8.1	1.000130
23500.0	24.9	-75.1	45.7	558.9	630.3	789.1	8.9	1.000133

STATION ALTITUDE 4723.77 FEET MSL
2 AUG. 54
ASCENSION NO. 1048 MDT

UPPER AIR DATA
015040003
GALT SOTIM

GEODETIC COORDINATES
23.12355 LAT DEG
106.75907 LON DEG

TABLE 29 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	418.4	-13.2	49.1	550.2	528.6	358.8	8.7	1.000131
24500.0	415.1	-14.5	49.5	551.9	526.9	358.2	8.7	1.000126
25000.0	412.0	-15.7	49.9	543.5	525.6	355.2	8.5	1.000126
25500.0	394.2	-15.3	48.5	535.1	524.0	352.2	8.3	1.000124
26000.0	396.1	-17.9	47.4	526.7	522.5	349.2	8.1	1.000121
26500.0	375.3	-19.0	50.0	518.1	521.3	352.2	7.3	1.000119
27000.0	370.7	-20.0	53.5	509.7	520.1	359.2	6.3	1.000117
27500.0	353.2	-21.0	57.0	501.4	518.8	6.8	5.3	1.000116
28000.0	355.7	-22.4	55.5	493.9	517.1	3.7	4.7	1.000113
28500.0	348.5	-23.6	56.0	486.6	515.4	345.3	4.6	1.000111
29000.0	341.3	-24.7	28.4	478.4	514.1	327.9	5.7	1.000128
29500.0	334.2	-25.7	73.5	470.4	512.9	317.2	7.2	1.000106
30000.0	327.2	-26.9	36.9	462.8	511.6	311.0	8.8	1.000105
30500.0	320.3	-28.1	78.2	455.1	509.9	308.0	9.6	1.000103
31000.0	313.6	-29.3	40.1	448.0	508.6	304.3	9.7	1.000101
31500.0	307.0	-30.6	42.0	440.9	506.8	297.0	9.0	1.000099
32000.0	300.5	-31.8	43.5	433.7	505.3	285.2	8.6	1.000098
32500.0	294.1	-32.9	45.0	426.4	503.9	271.6	8.9	1.000096
33000.0	287.9	-34.0	45.1	419.2	502.5	262.4	10.4	1.000094
33500.0	281.7	-35.1	47.2	412.1	501.2	256.5	12.2	1.000093
34000.0	275.5	-36.2	47.0	405.1	500.2	252.5	13.0	1.000091
34500.0	269.5	-37.3	43.0	398.3	500.3	249.8	14.9	1.000089
35000.0	263.7	-38.5	33.7**	391.6	506.7	247.8	15.5	1.000086
35500.0	258.0	-39.9	19.9**	385.2	505.1			1.000086
36000.0	252.2	-41.2	5.8**	378.8	503.6			1.000084

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

STATION ALTITUDE 4003.27 FEET
 3 AUG. 54
 ASCENSION NO. 1048 MDT

GEODETIC COORDINATES
 13.12355 LAT DEG
 106.75907 LON DEG

TABLE 30

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	574.1	12.1	57.	356.0	2.2
800.0	572.1	12.9	56.	9.0	4.6
750.0	571.1	11.0	53.	22.6	10.3
700.0	564.6	10.8	59.	13.5	15.3
650.0	561.0	7.9	40.	13.9	12.7
600.0	551.0	3.8	51.	40.3	7.5
550.0	546.4	7.9	59.	43.9	9.0
500.0	544.1	1.5	56.	13.7	7.4
450.0	541.0	0.9	49.	354.0	7.1
400.0	536.1	16.0	50.	355.1	6.4
350.0	537.3	23.5	56.	349.7	4.6
300.0	539.2	31.9	44.	255.3	8.6
250.0	541.7	41.7			

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

END

FILMED

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