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METEOROLOGICAL DATA REPORT

NIKE-HYDAC MK 12 STV (SR-039)
(27 September 1966)

BY
LEN E. CARTER

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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DA Task IV650212A127-02

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ABSTRACT

Meteorological data gathered for the launching of Nike-Hydac, MK 12 STV (SR-039) are presented for the Air Force Ballistic Missile Re-entry Systems Office, General Electric Company, and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.

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INTRODUCTION

Nike-Hycac, MK 12 STV (SR-039) was launched from Launch Complex 33, L-314, White Sands Missile Range (WSMR), New Mexico, at 0825 hours MST, 27 September 1966.

Meteorological data used in conjunction with theoretical calculations to predict rocket impact were collected by the Meteorological Support Division, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The Ballistic Meteorologists for this firing were Len E. Carter and SFC Leon H. Allen.

DISCUSSION

Wind data for the first 216 feet above the surface were obtained from a system composed of 5 Aerovanes mounted on a 200-foot tower and cabled to component indicators.

From 216 to 4,000 feet above the surface, wind data were obtained from double-theodolite-observed balloon ascents.

Temperature, pressure, and humidity data, along with upper wind data from 4,000 to 80,738 feet above the surface, were obtained from standard rawinsonde observations.

Mean wind component values in each ballistic zone were determined from vertical cross sections by the equal-area method.

Theoretical rocket performance values and ballistic factors as a function of altitude were provided by ASL, and are the basis for data appearing in Table VIII.

PAYLOAD		21.0	Pounds
CORIOLIS DISPLACEMENT	WEST	5.0	Miles
	TIME	20.2	Seconds
SECOND-STAGE IGNITION	ALTITUDE	36,252	Feet MSL
	TIME	236.2	Seconds
PEAK	ALTITUDE	723,966	Feet MSL
			Miles/MPH
UNIT WIND EFFECT		2.25	Miles/MPH
			Miles/MPH
TOWER TILT EFFECT		14.2	Miles/Degree

TABLE I. THEORETICAL ROCKET PERFORMANCE VALUES
NIKE-HYDAC, MK 12 STV (SR-039)

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
11- 60	.138
60- 108	.094
108- 148	.059
148- 184	.043
184- 216	.031
216- 300	.066
300- 400	.056
400- 600	.080
600- 800	.060
800-1000	.050

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
1000- 1400	.075
1400- 2000	.069
2000- 2500	.035
2500- 3000	.024
3000- 4000	.019
4000- 4315	.001
4315- 9000	.015
9000-15000	.018
15000-21000	.016
21000-26000	.014

LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
26000-31975	.005
31975-34000	.007
34000-36000	.033
36000-41000	.036
41000-46000	.013
46000-51000	.006
51000-56000	.004
56000-61000	.003
61000-66000	.002
66000-72738	.001

TABLE II. BALLISTIC FACTORS
NIKE-HYDAC, MK 12 STV (SR-039)

AERO-VANE NO. *	MEAN WIND COMPONENTS IN MILES PER HOUR										
	1 0600 MST		2 0630 MST		3 0700 MST		4 0715 MST		5 0730 MST		
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	
1	4.0N	1.0E	1.0N	0.0	0.0	1.0E	0.0	0.0	0.0	0.0	0.0
2	6.0	1.0	3.0	2.0E	1.0N	2.0	1.0N	1.0W	1.0N	1.0W	1.0W
3	5.0	1.0	4.0	0.0	2.0	2.0	0.0	2.0E	0.0	2.0E	2.0E
4	8.0	1.0	6.0	0.0	4.0	3.0	1.0N	4.0	2.0N	3.0	3.0
5	10.0	1.0	6.0	0.0	9.0	3.0	4.0	4.0	1.0	1.0	1.0

AERO-VANE NO. *	MEAN WIND COMPONENTS IN MILES PER HOUR									
	6 0740 MST		7 0750 MST		8 0800 MST		9 0818 MST		T-TIME 0825 MST	
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
1	0.0	0.0	5.0S	1.0E	7.0S	2.0E	5.0S	2.0E	4.0S	1.0E
2	1.0N	2.0W	4.0	1.0W	7.0	1.0W	5.0	2.0W	3.0	2.0W
3	0.0	1.0	4.0	1.0E	7.0	0.0	5.0	0.0	4.0	1.0
4	1.0S	0.0	5.0	2.0	7.0	2.0E	5.0	2.0E	5.0	1.0E
5	2.0N	3.0W	1.0	1.0	4.0	1.0	1.0S	2.0W	2.0	2.0W

TABLE III. ANEMOMETER WIND SPEED AND DIRECTION
NIKE-HYDAC, MK 12 STV (SR-039)

* Heights corresponding to Aerovane Numbers: 1 = 35 Feet 3 = 128 Feet 5 = 200 Feet
2 = 88 Feet 4 = 168 Feet

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN MILES PER HOUR											
	1 0600 MST		2 0630 MST		3 0700 MST		4 0715 MST		5 0730 MST			
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W		
216-300	9.5N	0.0	6.5N	0.5E	9.0N	3.0E	4.5N	4.0E	2.0N	0.5E		
300-400	8.5	3.0W	6.5	0.5	8.0	2.5	5.5	3.5	3.0	0.5W		
400-600	7.0	4.5	6.5	1.0	7.5	1.0	6.0	2.5	4.0	1.5		
600-800	6.0	5.5	6.5	0.0	7.0	0.5W	6.0	0.5	4.5	7.5		
800-1000	5.0	6.5	6.0	1.0W	6.5	2.5	5.5	0.5W	5.0	4.0		
1000-1400	5.0	10.0	4.5	7.0	5.0	4.0	5.5	2.0	5.0	6.5		
1400-2000	6.5	14.0	6.5	15.0	5.5	9.5	6.0	5.5	5.0	8.0		
2000-2500	7.0	17.5	10.5	22.0	5.5	17.0	6.5	11.5	6.0	12.0		
2500-3000	5.5	22.0	9.0	23.5	6.0	21.5	7.5	19.0	7.0	15.5		
3000-4000	3.5	30.0	5.0	21.5	4.0	24.5	6.0	23.0	5.5	20.0		

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA
NIKE-HYDAC, MK 12 STV (SR-039)

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN MILES PER HOUR											
	6		7		8		9		10		20	
	0710 MST		0750 MST		0800 MST		0810 MST		0820 MST		0830 MST	
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W
216-300	3.0W	1.5W	0.5N	2.5E	3.0E	2.0E	2.0E	2.0E	2.0E	2.0E	2.0E	1.0W
300-400	4.0	0.5E	0.0	3.0	1.5	4.0	4.0	2.5E	2.5E	2.5	0.0	0.0
400-600	4.0	1.0	1.5E	3.5	1.0W	5.0	5.0	3.0	4.0	2.5	2.0E	2.0E
600-800	5.0	0.5W	3.5	2.0	3.0	3.5	2.0	5.0	3.0	0.5N	3.0	3.0
800-1000	5.0	2.0	5.0	6.0	4.0	2.0	2.0	7.0	3.0	3.5	2.5	2.5
1000-1100	5.0	4.5	4.0	2.0W	3.5	1.5W	1.5W	6.5	2.0	5.5	1.0W	1.0W
1100-2000	4.0	10.0	4.0	5.5	4.0	5.0	5.0	3.0	7.0W	5.0	7.0	7.0
2000-2500	5.0	13.0	4.5	7.5	4.0	0.0	0.0	4.0	4.5	4.0	9.5	9.5
2500-3000	5.5	15.0	5.5	13.5	4.5	12.5	12.5	7.0	24.0	5.0	12.5	12.5
3000-4000	6.5	20.0	5.5	18.5	5.5	17.5	17.5	5.5	16.0	6.0	15.5	15.5

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA (Contd)
 WENK-INDAG, MK 12 (WV (411-939))

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN KNOTS					
	1 0500 MGT		2 0827 MGT		N-W	E-W
	N-S	E-W	N-S	E-W		
0000-0315	4.0N	11.5W	6.0N	6.0W		
0315-1200	18.5	14.5	0.0	9.0		
1200-1700	2.0N	11.0	2.5S	8.0		
1700-2500	3.0N	16.5	3.0	16.5		
2500-3000	4.0	22.5	0.0	21.5		
3000-3527.5	8.0	22.5	8.5	23.0		
3527.5-38000	16.5	28.5	0.0	31.0		
38000-40000	18.5	32.0	5.5N	30.5		
40000-45000	13.5	36.5	0.0	33.0		
45000-50000	5.5S	32.5	0.0	25.0		
50000-55000	0.0	27.0	0.0	18.0		
55000-60000	9.0	17.0	4.0N	10.5		
60000-65000	11.0N	13.0	TERMINATED			
65000-70000	6.0	3.5				
70000-76738	4.0	3.0				

TABLE V. RAWINSONDE-MEASURED WIND DATA
WIND VELOCITY IN KNOTS (ON 100)

UPPER AIR DATA
0027003903
WHITE SANDS SITE
TABLE VI

STATION ALTITUDE 3989.0 FEET MSL
27 SEPT. 66 0500 HRS MST
ASCENSION NO. 745

MSTM SITE COORDINATES
E 488,580 FEET
N 185,043 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
3989.0	874.9	14.2	5.9	57.0	1056.6	661.4	0.	0.	1.000278
4000.0	874.6	14.5	5.9	56.1	1055.2	661.7	359.5	0.1	1.000278
4500.0	859.2	22.8	3.8	28.8	1008.0	671.0	338.5	5.9	1.000259
5000.0	844.2	22.3	2.6	27.2	992.2	670.4	317.5	11.7	1.000253
5500.0	829.3	21.0	1.6	27.5	979.1	668.9	296.4	17.5	1.000248
6000.0	814.7	19.8	0.7	27.8	966.2	667.4	279.9	21.9	1.000244
6500.0	800.4	18.5	-0.3	28.1	953.5	665.9	280.0	21.3	1.000239
7000.0	786.3	17.2	-1.3	28.4	941.0	664.4	281.0	19.4	1.000235
7500.0	772.4	15.9	-2.2	28.7	928.6	662.9	282.7	16.3	1.000230
8000.0	758.9	14.7	-3.2	28.9	916.4	661.4	288.4	13.5	1.000226
8500.0	745.2	13.2	-3.3	31.4	904.4	659.8	295.3	10.7	1.000224
9000.0	731.7	11.8	-3.4	34.4	892.5	658.1	303.7	8.1	1.000221
9500.0	718.5	10.3	-3.6	37.5	880.9	656.4	310.3	8.0	1.000218
10000.0	705.5	8.9	-3.8	40.5	869.4	654.7	313.6	8.1	1.000216
10500.0	692.7	7.4	-4.2	43.6	858.2	653.0	314.0	7.3	1.000213
11000.0	679.9	6.1	-4.4	47.0	846.3	651.4	312.7	6.2	1.000210
11500.0	667.3	4.7	-4.7	50.5	834.6	649.9	302.4	4.8	1.000207
12000.0	654.9	3.4	-5.0	54.1	823.0	648.4	289.6	3.4	1.000204
12500.0	642.7	2.1	-5.4	57.6	811.6	646.8	266.3	3.1	1.000201
13000.0	630.8	0.8	-5.9	61.1	800.4	645.2	247.5	3.0	1.000198
13500.0	619.1	-0.3	-7.6	57.9	788.8	643.9	240.1	3.9	1.000193
14000.0	607.4	-1.0	-13.1	39.3	776.4	642.8	238.0	5.1	1.000184
14500.0	595.9	-2.0	-17.1	30.5	764.8	641.5	242.2	6.7	1.000179
15000.0	584.6	-3.0	-21.9	21.8	753.3	640.2	247.2	8.0	1.000173
15500.0	573.4	-4.2	-24.7	18.7	742.5	638.7	252.7	9.3	1.000170
16000.0	562.4	-5.6	-26.0	18.3	732.0	637.1	257.6	10.2	1.000167
16500.0	551.6	-6.7	-27.2	17.9	720.9	635.8	262.2	10.9	1.000164
17000.0	540.9	-7.2	-27.7	17.8	708.4	635.1	269.7	11.4	1.000161
17500.0	530.4	-7.8	-28.3	17.6	696.1	634.4	277.6	11.8	1.000158
18000.0	520.1	-8.3	-28.9	17.4	684.0	633.8	279.8	13.4	1.000155

UPPER AIR DATA
 0027003903
 WHITE SANDS SITE
 TABLE VI (Cont)

STATION ALTITUDE 3989.0 FEET NSL
 27 SEPT-66 0500 HRS MST
 ASCENSION NO. 745

HSTN SITE COORDINATES
 E 488,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
18500.0	510.0	-8.9	-29.4	17.2	672.2	633.1	282.0	14.9	1.000153
19000.0	500.2	-9.4	-30.0	17.1	660.5	632.5	284.2	14.3	1.000150
19500.0	490.3	-10.4	-30.8	17.1	649.7	631.3	285.4	17.2	1.000147
20000.0	480.5	-11.5	-31.6	17.2	639.5	630.0	285.3	17.5	1.000145
20500.0	470.8	-12.6	-32.5	17.2	629.4	628.6	284.8	16.8	1.000142
21000.0	461.5	-13.7	-33.4	17.3	619.5	627.3	284.1	16.0	1.000140
21500.0	452.3	-14.8	-34.3	17.4	609.8	625.9	282.2	15.9	1.000138
22000.0	443.2	-15.9	-35.2	17.5	600.2	624.6	280.7	16.5	1.000135
22500.0	434.4	-17.0	-36.0	17.6	590.8	623.2	279.6	17.8	1.000133
23000.0	425.7	-18.1	-36.9	17.7	581.5	621.9	279.2	19.0	1.000131
23500.0	417.2	-19.3	-37.8	17.8	572.4	620.5	278.9	20.2	1.000129
24000.0	408.9	-20.4	-38.7	17.9	563.5	619.1	279.3	20.6	1.000127
24500.0	400.7	-21.5	-39.6	18.0	554.7	617.8	279.5	20.9	1.000125
25000.0	392.5	-22.7	-40.4	18.3	546.0	616.3	279.1	21.0	1.000123
25500.0	384.3	-24.0	-41.2	19.0	537.4	614.6	279.3	21.1	1.000121
26000.0	376.3	-25.3	-42.1	19.6	529.0	613.0	290.1	21.2	1.000119
26500.0	368.4	-26.7	-42.9	20.2	520.7	611.4	280.3	21.9	1.000117
27000.0	360.7	-28.0	-43.8	20.8	512.6	609.7	280.3	22.9	1.000115
27500.0	353.2	-29.3	-44.6	21.4	504.6	608.1	281.4	23.3	1.000113
28000.0	345.8	-30.6	-45.5	22.1	496.7	606.4	282.5	23.8	1.000111
28500.0	338.6	-31.9	-46.4	22.7	489.0	604.8	282.5	24.9	1.000110
29000.0	331.4	-33.2	-46.7	24.7	481.3	603.2	283.4	25.4	1.000108
29500.0	324.3	-34.5	-46.7	26.3	473.5	601.6	285.7	24.9	1.000106
30000.0	317.4	-35.6	-44.5	40.2	465.4	600.2	287.2	24.8	1.000104
30500.0	310.5	-36.5	-41.7	59.6	457.1	599.0	288.2	15.0	1.000103
31000.0	303.7	-37.7	-42.9	59.0	449.2	597.6	289.2	24.1	1.000101
31500.0	297.0	-38.8	-44.4	56.8	441.5	596.1	290.1	23.3	1.000099
32000.0	290.4	-40.0	-45.8	54.6	434.0	594.6	290.1	23.4	1.000097
32500.0	284.0	-41.2	-47.3	52.4	426.5	593.1	291.1	23.5	1.000096
33000.0	277.8	-42.3	-48.8	50.2	419.3	591.6	292.8	23.5	1.000094

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT.66 0500 HRS MST
 ASCENSION NO. 745

UPPER AIR DATA
 0027002903
 WHITE SANDS SITE
 TABLE VI (Cont)

WSTM SITE COORDINATES
 E 488,590 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
33500.0	271.7	-43.5	-50.3	48.0	442.1	590.1	295.2	295.2	23.6	1.000092
34000.0	265.5	-44.8	-52.1	44.3**	405.0	588.5	297.9	297.9	23.6	1.000091
34500.0	259.4	-46.1	-54.3	39.5**	398.1	586.7	299.7	299.7	24.8	1.000089
35000.0	253.4	-47.5	-56.6	34.8**	391.3	584.9	301.2	301.2	26.2	1.000087
35500.0	247.6	-48.9	-59.0	30.0**	384.6	583.2	300.8	300.8	27.4	1.000086
36000.0	241.9	-50.2	-61.6	25.2**	378.1	581.4	300.5	300.5	29.7	1.000084
36500.0	236.3	-51.6	-64.4	20.4**	371.6	579.6	300.6	300.6	33.8	1.000083
37000.0	230.9	-53.0	-67.5	15.6**	365.3	577.8	300.5	300.5	36.0	1.000081
37500.0	225.6	-54.3	-71.2	10.8**	359.1	576.0	300.2	300.2	37.2	1.000080
38000.0	220.4	-55.7	-76.1	6.0**	353.1	574.2	299.8	299.8	39.2	1.000079
38500.0	215.3	-57.0	-86.6	1.2**	347.1	572.4	299.3	299.3	41.0	1.000077
39000.0	210.2	-58.1	0.	-0. **	340.6	571.0	297.9	297.9	39.8	1.000076
39500.0	205.1	-59.1	0.	-0. **	333.9	569.6	296.4	296.4	38.8	1.000074
40000.0	200.2	-60.1	0.	-0. **	327.4	568.3	294.6	294.6	38.2	1.000073
40500.0	195.3	-61.1	0.	-0. **	321.0	567.0	293.2	293.2	37.5	1.000071
41000.0	190.6	-62.1	0.	-0. **	314.8	565.6	292.0	292.0	36.8	1.000070
41500.0	186.1	-63.1	0.	-0. **	308.7	564.3	292.5	292.5	37.5	1.000069
42000.0	181.5	-63.6	0.	-0. **	301.8	563.7	293.1	293.1	38.2	1.000067
42500.0	177.1	-63.6	0.	-0. **	294.5	563.7	293.7	293.7	38.6	1.000066
43000.0	172.8	-63.6	0.	-0. **	287.3	563.7	293.5	293.5	38.4	1.000064
43500.0	168.6	-63.6	0.	-0. **	280.3	563.7	292.3	292.3	37.6	1.000062
44000.0	164.4	-63.6	0.	-0. **	273.4	563.7	287.5	287.5	35.8	1.000061
44500.0	160.4	-63.6	0.	-0. **	266.7	563.7	280.7	280.7	33.3	1.000059
45000.0	156.5	-63.6	0.	-0. **	260.2	563.7	274.4	274.4	33.6	1.000058
45500.0	152.7	-63.6	0.	-0. **	253.9	563.7	268.2	268.2	34.6	1.000057
46000.0	149.0	-63.6	0.	-0. **	247.7	563.7	263.6	263.6	35.2	1.000055
46500.0	145.3	-63.6	0.	-0. **	241.6	563.7	260.6	260.6	35.9	1.000054
47000.0	141.8	-63.6	0.	-0. **	235.7	563.7	261.6	261.6	36.9	1.000052
47500.0	138.3	-63.6	0.	-0. **	230.0	563.7	262.2	262.2	36.2	1.000051
48000.0	134.9	-63.6	0.	-0. **	224.4	563.7	262.3	262.3	33.8	1.000050

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

UPPER AIR DATA
0027003903
WHITE SANDS SITE
TABLE VI (Cont)

STATION ALTITUDE 3989.0 FEET MSL
27 SEPT. 66 0500 HRS MST
ASCENSION NO. 745

HSTM SITE COORDINATES
E 488,580 FEET
N 185,045 FEET

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)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
48500.0	131.6	-63.6	0.	-0. **	218.9	563.7	261.7	32.0	1.000049
49000.0	128.4	-63.6	0.	-0. **	213.5	563.7	260.9	30.3	1.000048
49500.0	125.3	-63.6	0.	-0. **	208.3	563.7	260.3	28.7	1.000046
50000.0	122.2	-63.8	0.	-0. **	203.4	563.4	259.7	27.1	1.000045
50500.0	119.2	-64.4	0.	-0. **	199.0	562.5	261.2	27.5	1.000044
51000.0	116.3	-65.1	0.	-0. **	194.8	561.6	262.8	27.7	1.000043
51500.0	113.4	-65.8	0.	-0. **	190.6	560.7	265.4	27.5	1.000042
52000.0	110.6	-66.4	0.	-0. **	186.5	559.8	267.6	27.3	1.000042
52500.0	107.9	-66.5	0.	-0. **	182.0	559.7	268.8	27.1	1.000041
53000.0	105.3	-66.5	0.	-0. **	177.4	559.8	269.9	26.6	1.000040
53500.0	102.7	-66.4	0.	-0. **	173.0	559.9	270.8	25.5	1.000039
54000.0	100.1	-66.3	0.	-0. **	168.6	560.0	272.6	24.6	1.000038
54500.0	97.6	-66.2	0.	-0. **	164.4	560.1	274.9	23.8	1.000037
55000.0	95.2	-66.1	0.	-0. **	160.3	560.3	275.4	23.2	1.000036
55500.0	92.9	-66.0	0.	-0. **	156.3	560.4	275.0	22.8	1.000035
56000.0	90.6	-66.0	0.	-0. **	152.3	560.5	275.2	20.7	1.000034
56500.0	88.4	-65.9	0.	-0. **	148.5	560.6	275.3	18.4	1.000033
57000.0	86.2	-65.8	0.	-0. **	144.8	560.7	274.1	16.1	1.000032
57500.0	84.0	-65.7	0.	-0. **	141.2	560.8	275.5	13.7	1.000031
58000.0	82.0	-65.2	0.	-0. **	137.4	561.5	282.8	11.4	1.000031
58500.0	80.0	-64.7	0.	-0. **	133.8	562.2	288.2	10.8	1.000030
59000.0	78.1	-64.2	0.	-0. **	130.3	562.8	291.3	12.3	1.000029
59500.0	76.2	-63.7	0.	-0. **	126.8	563.5	294.9	13.5	1.000028
60000.0	74.4	-63.2	0.	-0. **	123.5	564.2	299.3	14.2	1.000027
60500.0	72.6	-62.7	0.	-0. **	120.2	564.8	302.4	15.2	1.000027
61000.0	70.9	-62.2	0.	-0. **	117.0	565.5	303.6	16.7	1.000026
61500.0	69.1	-61.7	0.	-0. **	114.0	566.2	305.3	17.5	1.000025
62000.0	67.5	-61.2	0.	-0. **	110.9	566.8	307.8	17.0	1.000025
62500.0	65.9	-60.7	0.	-0. **	108.0	567.5	309.1	16.6	1.000024
63000.0	64.3	-60.2	0.	-0. **	105.2	568.2	307.8	16.6	1.000023

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

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT.66 0500 HRS MST
 ASCENSION NO. 745

UPPER AIR DATA
 0027003903
 WHITE SANDS SITE
 TABLE VI (Cont)

MSYM SITE COORDINATES
 E 489.580 FEET
 N 185.045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
63500.0	62.7	-59.7	0.	-0. **	102.4	568.8	309.8	36.0	1.000023
64000.0	61.2	-59.2	0.	-0. **	99.7	569.5	310.9	14.0	1.000022
64500.0	59.7	-58.7	0.	-0. **	97.1	570.2	329.0	11.9	1.000022
65000.0	58.3	-58.2	0.	-0. **	94.5	570.8	341.1	9.7	1.000021
65500.0	56.9	-57.7	0.	-0. **	92.0	571.5	348.1	8.0	1.000020
66000.0	55.5	-57.2	0.	-0. **	89.0	572.1	348.2	7.1	1.000020
66500.0	54.2	-56.8	0.	-0. **	87.2	572.8	334.8	6.3	1.000019
67000.0	52.9	-56.3	0.	-0. **	85.0	573.4	305.6	5.7	1.000019
67500.0	51.6	-56.4	0.	-0. **	83.0	573.3	283.1	5.7	1.000018
68000.0	50.4	-56.4	0.	-0. **	81.1	573.2	278.8	7.2	1.000018
68500.0	49.2	-56.5	0.	-0. **	79.2	573.2	274.4	8.7	1.000018
69000.0	48.1	-56.5	0.	-0. **	77.3	573.1	273.2	8.8	1.000017
69500.0	46.9	-56.6	0.	-0. **	75.5	573.0	272.8	8.5	1.000017
70000.0	45.8	-56.6	0.	-0. **	73.8	572.9	273.7	8.2	1.000016
70500.0	44.7	-56.7	0.	-0. **	72.0	572.9	278.4	7.8	1.000016
71000.0	43.7	-56.8	0.	-0. **	70.4	572.8	283.0	7.3	1.000016
71500.0	42.7	-56.7	0.	-0. **	68.7	572.9	287.7	7.5	1.000015
72000.0	41.7	-56.3	0.	-0. **	67.0	573.4	292.4	7.9	1.000015
72500.0	40.7	-56.0	0.	-0. **	65.3	573.8	297.8	8.2	1.000015
73000.0	39.8	-55.6	0.	-0. **	63.7	574.3	306.7	7.3	1.000014
73500.0	38.8	-55.2	0.	-0. **	62.1	574.8	315.5	6.5	1.000014
74000.0	37.9	-54.9	0.	-0. **	60.6	575.3	323.5	5.7	1.000013
74500.0	37.1	-54.5	0.	-0. **	59.0	575.8	331.0	4.9	1.000013
75000.0	36.2	-54.1	0.	-0. **	57.6	576.2	337.3	4.1	1.000013
75500.0	35.4	-53.8	0.	-0. **	56.1	576.7	340.0	3.1	1.000013
76000.0	34.5	-53.4	0.	-0. **	54.8	577.2	342.8	2.1	1.000012
76500.0	33.7	-53.1	0.	-0. **	53.4	577.7	317.7	1.3	1.000012
77000.0	32.9	-52.7	0.	-0. **	52.1	578.1	292.1	0.5	1.000012
77500.0	32.2	-52.3	0.	-0. **	50.8	578.6	284.7	0.6	1.000011
78000.0	31.4	-52.0	0.	-0. **	49.5	579.1	284.7	1.0	1.000011

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

UPPER AIR DATA
 0027003903
 WHITE SANDS SITE
 TABLE VI (Cont)

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT.66 0500 HRS MST
 ASCENSION NO. 745

WSYM SITE COORDINATES
 E 489,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
78500.0	30.7	-51.6	-0. **	48.3	579.6	250.1	1.2	1.000011
79000.0	30.0	-51.3	-0. **	47.1	580.0	170.9	1.1	1.000010
79500.0	29.3	-50.9	-0. **	45.9	580.5	117.7	1.0	1.000010
80000.0	28.6	-50.5	-0. **	44.8	581.0	196.4	0.7	1.000010
80500.0	27.9	-50.2	-0. **	43.7	581.4	275.2	0.5	1.000010
81000.0	27.3	-50.1	-0. **	42.7	581.5	352.7	0.4	1.000009
81500.0	26.7	-50.0	-0. **	41.7	581.6	70.0	0.4	1.000009
82000.0	26.1	-50.0	-0. **	40.7	581.7	70.2	0.7	1.000009
82500.0	25.5	-49.9	-0. **	39.8	581.8	7.6	1.4	1.000009
83000.0	24.9	-49.8	-0. **	38.8	581.9	313.3	2.0	1.000009
83500.0	24.3	-49.7	-0. **	37.9	582.0	334.3	2.3	1.000008
84000.0	23.8	-49.7	-0. **	37.1	582.1	355.3	2.5	1.000008
84500.0	23.2	-49.6	-0. **	36.2	582.2	3.4	2.7	1.000008
85000.0	22.7	-49.5	-0. **	35.4	582.3	1.4	2.7	1.000008
85500.0	22.2	-49.4	-0. **	34.5	582.4			1.000008
86000.0	21.7	-49.4	-0. **	33.7	582.5			1.000008
86500.0	21.2	-49.3	-0. **	33.0	582.6			1.000007
87000.0	20.7	-49.2	-0. **	32.2	582.7			1.000007
87500.0	20.2	-49.1	-0. **	31.5	582.8			1.000007
88000.0	19.8	-49.0	-0. **	30.7	582.9			1.000007

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

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT. 66 0827 HRS MST
 ASCENSION NO. 746

UPPER AIR DATA
 0027003904
 WHITE SANDS SITE
 TABLE VII

WSTN SITE COORDINATES
 E 488,580 FEET
 N 189,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
2989.0	876.5	21.8	7.3	39.0	1030.8	670.2	180.0	1.9	1.000274
4000.0	876.2	21.7	7.1	36.8	1030.8	670.1	180.7	2.0	1.000274
4500.0	860.8	20.0	2.6	31.4	1019.8	667.8	212.2	3.7	1.000260
5000.0	845.8	22.0	3.7	30.0	993.0	670.1	243.8	5.4	1.000256
5500.0	830.7	20.7	2.6	30.1	981.7	668.6	275.3	7.1	1.000251
6000.0	815.9	19.4	1.5	30.2	968.5	667.1	298.6	9.0	1.000246
6500.0	801.4	18.2	0.5	30.3	955.6	665.6	293.6	12.0	1.000241
7000.0	787.1	16.9	-0.6	30.4	942.9	664.1	290.8	14.1	1.000236
7500.0	773.1	15.6	-1.7	30.5	930.3	662.6	289.3	15.7	1.000232
8000.0	759.4	14.4	-2.7	30.6	917.9	661.1	288.2	15.8	1.000227
8500.0	745.8	13.1	-3.8	30.7	905.7	659.5	287.2	15.6	1.000223
9000.0	732.6	11.8	-4.8	30.8	893.7	658.0	285.6	13.9	1.000219
9500.0	719.5	10.5	-5.9	30.9	881.8	656.5	283.4	12.1	1.000215
10000.0	706.7	9.3	-7.0	31.0	870.2	655.0	279.4	9.8	1.000211
10500.0	693.8	7.9	-7.7	32.3	858.4	653.4	274.1	7.7	1.000208
11000.0	680.9	6.5	-8.2	34.1	846.7	651.8	267.4	6.1	1.000205
11500.0	668.3	5.1	-8.8	35.9	835.3	650.1	257.5	4.6	1.000202
12000.0	656.0	3.8	-9.4	37.7	824.0	648.5	245.3	3.3	1.000198
12500.0	643.8	2.4	-10.1	39.5	812.8	646.9	224.1	2.8	1.000195
13000.0	631.9	1.0	-10.8	41.2	801.9	645.2	210.9	2.9	1.000192
13500.0	620.1	0.0	-14.7	32.1	790.0	643.9	205.5	3.6	1.000186
14000.0	608.4	-0.9	-17.6	27.1	777.9	642.7	213.2	4.4	1.000181
14500.0	596.8	-2.0	-19.5	24.9	766.2	641.5	223.1	5.4	1.000177
15000.0	585.5	-3.0	-21.5	22.6	754.6	640.2	233.8	6.5	1.000174
15500.0	574.3	-4.0	-23.6	20.4	743.1	639.0	241.2	7.6	1.000170
16000.0	563.4	-5.1	-25.7	18.1	731.9	637.7	245.8	8.8	1.000167
16500.0	552.6	-5.5	-26.2	18.0	719.1	637.2	249.6	9.5	1.000164
17000.0	542.0	-6.0	-26.5	18.0	706.4	636.6	253.1	10.2	1.000161
17500.0	531.5	-6.4	-26.9	18.0	693.9	636.1	255.7	10.8	1.000158
18000.0	521.3	-6.9	-27.3	18.0	681.7	635.6	259.1	11.4	1.000155

UPPER AIR DATA
 Q027003904
 WHITE SANDS SITE
 TABLE VII (Cont.)

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT. 66 0827 HRS MST
 ASCENSION NO. 746

WSTM SITE COORDINATES
 E 488,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
18500.0	511.1	-7.8	-28.0	18.2	670.9	634.4	264.0	11.9	1.000153
19000.0	501.1	-9.0	-28.8	18.5	660.7	633.0	267.6	12.5	1.000150
19500.0	491.3	-10.2	-29.6	18.8	650.8	631.5	270.5	13.0	1.000146
20000.0	481.7	-11.4	-30.5	19.1	641.0	630.0	272.3	13.5	1.000145
20500.0	472.2	-12.6	-31.3	19.4	631.3	628.6	273.2	14.0	1.000143
21000.0	463.0	-13.8	-32.2	19.7	621.9	627.1	270.4	14.7	1.000141
21500.0	453.9	-14.9	-33.0	19.9	612.2	625.8	266.8	15.6	1.000139
22000.0	444.9	-14.9	-33.4	19.2	600.0	625.8	262.6	16.6	1.000136
22500.0	435.9	-15.7	-33.7	19.9	589.8	624.8	258.9	18.0	1.000133
23000.0	427.0	-17.0	-34.2	21.2	580.6	623.3	255.5	19.5	1.000131
23500.0	418.3	-18.2	-34.6	22.5	571.5	621.8	253.7	19.7	1.000129
24000.0	409.7	-19.5	-35.2	23.7	562.6	620.2	252.7	19.9	1.000127
24500.0	401.4	-20.7	-35.7	25.0	553.9	618.7	253.7	20.3	1.000125
25000.0	393.2	-22.0	-36.3	26.3	545.3	617.2	254.8	20.8	1.000123
25500.0	385.2	-23.2	-36.9	27.6	536.9	615.6	256.1	21.4	1.000121
26000.0	377.3	-24.5	-37.6	28.9	528.6	614.1	257.6	22.5	1.000119
26500.0	369.6	-25.7	-38.3	30.2	520.4	612.5	259.3	23.7	1.000117
27000.0	362.1	-27.0	-39.0	31.5	512.4	611.0	259.2	24.6	1.000115
27500.0	354.5	-28.1	-39.8	32.1	504.0	609.6	258.8	25.3	1.000113
28000.0	347.0	-29.1	-40.7	32.2	495.4	608.3	258.2	25.2	1.000111
28500.0	339.6	-30.2	-41.6	32.3	496.9	607.0	257.6	25.0	1.000109
29000.0	332.4	-31.2	-42.5	32.4	478.6	605.7	257.1	24.7	1.000108
29500.0	325.3	-32.3	-43.4	32.5	470.5	604.4	257.5	24.6	1.000106
30000.0	318.4	-33.3	-44.3	32.6	462.4	603.1	258.5	24.8	1.000104
30500.0	311.6	-34.3	-45.2	32.8	454.6	601.8	260.2	24.9	1.000102
31000.0	305.0	-35.4	-46.1	32.9	446.9	600.4	262.1	25.0	1.000100
31500.0	298.5	-36.4	-47.0	33.0	439.3	599.1	263.3	25.2	1.000098
32000.0	292.0	-37.7	-48.3	32.7	432.1	597.5	264.5	25.2	1.000097
32500.0	285.6	-39.1	-49.6	32.3	425.1	595.7	265.2	24.9	1.000095
33000.0	279.3	-40.4	-51.0	31.7**	418.2	594.0	265.5	24.9	1.000094

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

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT.66 0827 HRS MST
 ASCENSION NO. 746

UPPER AIR DATA
 9027003904
 WHITE SANDS SITE
 TABLE VII (Cont)

WSTM SITE COORDINATES
 E 488,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
33500.0	273.0	-41.8	-53.1	28.5**	411.2	592.2	265.3	25.3	1.000092
34000.0	266.8	-43.2	-55.3	25.3**	404.3	590.5	265.2	25.8	1.000090
34500.0	260.7	-44.6	-57.6	22.2**	397.5	588.7	265.2	26.5	1.000089
35000.0	254.8	-46.0	-60.0	19.0**	390.8	586.9	266.0	27.3	1.000087
35500.0	249.0	-47.4	-62.6	15.9**	384.3	585.1	267.2	28.2	1.000086
36000.0	243.4	-48.8	-65.4	12.7**	377.9	583.3	270.1	29.1	1.000084
36500.0	237.9	-50.1	-68.6	9.5**	371.6	581.5	273.7	30.0	1.000083
37000.0	232.5	-51.5	-72.5	6.4**	365.5	579.7	273.8	31.5	1.000081
37500.0	227.2	-52.9	-78.0	3.2**	359.4	577.9	273.3	33.1	1.000080
38000.0	222.0	-54.3	-104.0	0.0**	353.5	576.0	277.9	35.1	1.000079
38500.0	216.7	-55.5	0.	-0. **	347.0	574.4	282.2	37.0	1.000077
39000.0	211.6	-56.7	0.	-0. **	340.6	572.8	281.8	37.9	1.000076
39500.0	206.5	-58.0	0.	-0. **	334.3	571.2	282.0	39.1	1.000074
40000.0	201.6	-59.2	0.	-0. **	328.2	569.6	283.8	41.0	1.000073
40500.0	196.7	-60.4	0.	-0. **	322.2	568.0	283.0	42.5	1.000072
41000.0	192.0	-61.6	0.	-0. **	316.3	566.3	278.9	43.1	1.000070
41500.0	187.5	-62.8	0.	-0. **	310.5	564.7	276.9	43.6	1.000069
42000.0	182.9	-63.7	0.	-0. **	304.2	563.6	276.7	44.0	1.000068
42500.0	178.5	-64.0	0.	-0. **	297.3	563.1	277.7	42.4	1.000066
43000.0	174.1	-63.8	0.	-0. **	289.8	563.3	279.3	39.6	1.000065
43500.0	169.9	-63.0	0.	-0. **	281.6	564.5	281.2	36.3	1.000063
44000.0	165.7	-62.2	0.	-0. **	273.7	565.6	283.3	32.8	1.000061
44500.0	161.7	-62.2	0.	-0. **	267.1	565.5	283.1	29.6	1.000059
45000.0	157.7	-63.0	0.	-0. **	261.5	564.5	282.3	26.4	1.000058
45500.0	153.9	-63.7	0.	-0. **	256.0	563.5	276.1	25.3	1.000057
46000.0	150.1	-64.5	0.	-0. **	250.7	562.5	269.0	24.5	1.000056
46500.0	146.5	-65.2	0.	-0. **	245.4	561.5	264.3	26.1	1.000055
47000.0	142.9	-65.0	0.	-0. **	239.1	561.8	259.7	28.0	1.000053
47500.0	139.4	-64.6	0.	-0. **	232.8	562.3	259.0	28.8	1.000052
48000.0	136.0	-64.2	0.	-0. **	226.7	562.9	258.5	29.5	1.000050

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

STATION ALTITUDE 3989.0 FEET MSL
 27 SEPT. 66 0827 HRS MST
 ASCENSION MD. 746

UPPER AIR DATA
 0027003904
 WHITE SANDS SITE
 TABLE VII (Cont)

MSTM SITE COORDINATES
 E 488,580 FEET
 N 185,045 FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
48500.0	132.6	-63.7	-0. **	220.6	563.6	260.0	27.4	1.000049
49000.0	129.4	-63.1	-0. **	214.3	564.3	261.4	25.2	1.000048
49500.0	126.3	-62.6	-0. **	208.9	565.0	261.9	22.7	1.000047
50000.0	123.2	-62.4	-0. **	203.6	565.3	262.4	20.4	1.000045
50500.0	120.2	-63.1	-0. **	199.3	564.3	263.1	20.2	1.000044
51000.0	117.2	-63.8	-0. **	195.1	563.3	264.1	20.1	1.000043
51500.0	114.4	-64.6	-0. **	191.0	562.4	265.9	20.5	1.000043
52000.0	111.6	-65.3	-0. **	187.0	561.4	268.1	20.8	1.000042
52500.0	108.8	-65.7	-0. **	182.8	560.9	271.6	20.6	1.000041
53000.0	106.2	-65.7	-0. **	178.3	560.8	274.3	20.2	1.000040
53500.0	103.5	-65.7	-0. **	173.9	560.8	274.7	19.0	1.000039
54000.0	101.0	-65.7	-0. **	169.6	560.8	275.2	17.8	1.000038
54500.0	98.5	-65.7	-0. **	165.4	560.8	275.6	16.9	1.000037
55000.0	96.1	-64.8	-0. **	160.7	562.0	275.9	15.7	1.000036
55500.0	93.7	-63.7	-0. **	155.9	563.6	275.5	13.9	1.000035
56000.0	91.4	-62.5	-0. **	151.3	565.1	277.0	12.1	1.000034
56500.0	89.2	-62.5	-0. **	147.6	565.1	284.4	10.7	1.000033
57000.0	87.1	-62.8	-0. **	144.2	564.8			1.000032
57500.0	84.9	-63.0	-0. **	140.8	564.5			1.000031
58000.0	82.9	-63.3	-0. **	137.6	564.1			1.000031

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

RELEASE TIME (MST)	SECOND-STAGE IMPACT DISPLACEMENT IN MILES DUE TO WIND										AZI- MUTH (DEG- REF)	THEORETICAL IMPACT FROM LAUNCHER (IN MILES)	
	11-216 FT					4000-72738 FT						RANGE	E-W
	N-S	E-W	N-S	E-W	TOTAL	N-S	E-W	N-S	E-W	N-S			
0500	4.6N	0.8E	8.0N	10.5W	17.1N	10.2W	4.8N	10.2W	19.9W	352.0	83.6	82.8N	11.6W
0500	2.5N	0.4E	7.9N	7.2W	15.2N	10.2W	4.8N	10.2W	17.0W	353.8	81.1	80.6N	8.7W
0500	1.5N	1.5E	8.0N	5.1W	14.3N	10.2W	4.8N	10.2W	13.8W	356.0	79.4	79.2N	5.5W
0500	1.3N	1.6E	6.9N	2.6W	13.0N	10.2W	4.8N	10.2W	14.2W	357.0	76.7	76.8N	2.9W
0500	0.5N	0.4E	5.3N	6.0W	10.6N	10.2W	4.8N	10.2W	15.8W	354.7	84.5	81.2N	7.5W
0500	0.2N	0.8W	5.3N	5.3W	10.1N	10.2W	4.8N	10.2W	16.3W	354.4	82.0	81.7N	8.0W
0500	3.5S	0.7E	3.4N	1.9W	4.7N	10.2W	4.8N	10.2W	12.1W	357.7	76.9	76.8N	3.1W
0500	5.6S	0.7E	2.2N	0.6W	2.1N	10.2W	4.8N	10.2W	10.1W	358.6	75.5	75.2N	1.8W
0500	3.7S	0.5E	4.4N	1.5W	5.5N	10.2W	4.8N	10.2W	12.2W	357.8	76.7	76.6N	2.9W
0500	3.0S	0.3W	1.9N	0.6W	3.7N	10.2W	4.8N	10.2W	11.1W	357.9	76.6	76.5N	2.8W
0827	3.0S	0.3W	1.9N	0.6W	0.2N	10.6W	1.3N	10.6W	12.5W	357.6	77.0	76.9N	3.2W

LAUNCHER SETTING (ELEVATION 85.3 DEGREES QR), NO WIND IMPACT PREDICTED SECOND-STAGE IMPACT SECOND-STAGE IMPACT, RADAR TRACK PREDICTED BOOSTER IMPACT ACTUAL BOOSTER IMPACT	MILES FROM LAUNCHER	
	RANGE	E-W
011.5	66.7	13.3W
007.2	66.2	8.3W
357.6	70.0	2.9W
352.1	80.5	11.1W
011.0	0.8	0.2W
N/A	N/A	N/A

TABLE VIII. IMPACT PREDICTION DATA
NIKE-HMDAG, MK 12 (STV (SR-039))

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing information must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate method)		2A. REPORT SECURITY CLASSIFICATION	
U. S. Army Electronics Command Fort Monmouth, New Jersey		UNCLASSIFIED	
		2B. GROUP	
2. REPORT TITLE			
METEOROLOGICAL DATA REPORT, NIKE-HYDAC, MK 12 STV (SR-039)			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
5. AUTHOR(S) (Last name, first name, initial)			
CAPTER, Len E			
6. REPORT DATE		7A. TOTAL NO. OF PAGES	7B. NO. OF REFS
November 1966		18	None
8A. CONTRACT OR GRANT NO.		8B. ORIGINATOR'S REPORT NUMBER(S)	
D. PROJECT NO.		ER-97	
c. DA Task IV650212AL27-02		9B. OTHER REPORT NO(S) (i.e., other numbers that may be included in this report)	
10. AVAILABILITY/LIMITATION NOTICES			
Distribution of this document is restricted			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
		U. S. Army Electronics Command Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico	
13. ABSTRACT			
<p>Meteorological data gathered for the launching of Nike-Hydrac, MK 12 STV (SR-039) are presented for the Air Force Ballistic Missile Re-entry Systems Office, General Electric Company, and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.</p>			

UNCLASSIFIED
Security Classification

KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
1. Ballistics 2. Meteorology 3. Wind						

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