

UNCLASSIFIED

AD NUMBER
AD842837
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; NOV 1968. Other requests shall be referred to the U. S. Army Electronics Command, Fort Monmouth, New Jersey.
AUTHORITY
st-a usaec notice, 13 Sep 1971

THIS PAGE IS UNCLASSIFIED

DR-369  
November 1968

THIS DOCUMENT IS SUBJECT TO SPECIAL EXPORT CONTROLS AND EACH TRANSMITTAL TO FOREIGN GOVERNMENTS OR FOREIGN NATIONALS MAY BE MADE ONLY WITH PRIOR APPROVAL OF ATMOSPHERIC SCIENCES RESEARCH OFFICE, WHITE SANDS MISSILE RANGE, NEW MEXICO.

AD

AD 842837

METEOROLOGICAL DATA REPORT

MIKE-HYDAC STV, SR-076  
(10 October 1968)

BY

LEN E. CARTER

ATMOSPHERIC SCIENCES RESEARCH OFFICE  
WHITE SANDS MISSILE RANGE, NEW MEXICO

.....  
**ECOM**

UNITED STATES ARMY ELECTRONICS COMMAND

DDC  
NOV 12 1968

SECTION 2	
TYPE SECTION <input type="checkbox"/>	
BY SECTION <input type="checkbox"/>	
DATE OF REPORT	
DATE OF REVIEW	
DATE OF REVISION	
DATE OF CLOSURE	
BY	DATE

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return it to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

METEOROLOGICAL DATA REPORT

NIKE-HYDAC STV, SR-076  
(10 October 1968)

By

Len E. Carter

DR-369

November 1968

DA Task 1T665702D127-02

ATMOSPHERIC SCIENCES RESEARCH OFFICE  
WHITE SANDS MISSILE RANGE, NEW MEXICO

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of Atmospheric Sciences Research Office, White Sands Missile Range, New Mexico.

## ABSTRACT

Meteorological data gathered for the launching of Nike-Hydac STV, SR-076, are presented for the Space and Missile Systems Organization, Greenbelt, Maryland, and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.

## CONTENTS

	PAGE
ABSTRACT -----	iii
INTRODUCTION -----	1
DISCUSSION -----	1
TABLES	
I. Theoretical Rocket Performance Values -----	2
II. Ballistic Factors -----	3
III. Anemometer Wind Speed and Direction -----	4
IV. Pilot-Balloon-Measured Wind Data -----	5
V. Rawinsonde-Measured Wind Data -----	6
VI. Significant Level Data (Release Time: 0330 MDT) -----	7
VII. Upper Air Data (Release Time: 0330 MDT) -----	8
VIII. Mandatory Levels (Release Time: 0330 MDT) -----	15
IX. Significant Level Data (Release Time: 0630 MDT) -----	16
X. Upper Air Data (Release Time: 0630 MDT) -----	17
XI. Mandatory Levels (Release Time: 0630 MDT) -----	24
XII. Impact Prediction Data -----	25

## INTRODUCTION

Nike-Hydac STV, SR-076, was launched from LC-33, L-314, White Sands Missile Range (WSMR), New Mexico, at 0630 hours MDT, 10 October 1968.

Meteorological data used in conjunction with theoretical calculations to predict rocket impact were collected by the Meteorological Support Technical Area, U. S. Army Electronics Research and Development Activity, WSMR, New Mexico. The Ballistic Meteorologists for this firing were Gordon L. Dunaway and Len E. Carter.

## DISCUSSION

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

From 216 to 4,000 feet above the surface, wind data were obtained from T-9 Radar-tracked balloon ascents.

Temperature, pressure, and humidity data, along with upper wind data from 4,000 to 100,000 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 wind-weighting values as a function of altitude were provided by the Meteorological Support Technical Area, WSMR, New Mexico, and are the basis for the data appearing in Table I.

PAYLOAD		223	Pounds
CORIOLIS DISPLACEMENT	WEST	4.9	Miles
	TIME	20.0	Seconds
SECOND-STAGE IGNITION	ALTITUDE	35,760	Feet MSL
	TIME	236	Seconds
PEAK	ALTITUDE	716,000	Feet MSL
	HEAD	2.51	Miles/MPH
UNIT WIND EFFECT	CROSS	2.60	Miles/MPH
	TAIL	2.52	Miles/MPH
TOWER TILT EFFECT		14.53	Miles/Degree

TABLE I. THEORETICAL ROCKET PERFORMANCE VALUES  
NIKE-HYDAC STV, SR-076



LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS	LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS	LAYERS IN FEET ABOVE GROUND	BALLISTIC FACTORS
15- 60	.126	1000- 1400	.063	21000-26000	-.013
60- 108	.084	1400- 2000	.066	26000-31770	-.016
108- 148	.053	2000- 2500	.035	31770-36000	.129
148- 184	.041	2500- 3000	.028	36000-41000	.057
184- 216	.026	3000- 3500	.014	41000-46000	.026
216- 300	.062	3500- 4000	.005	46000-51000	.015
300- 400	.058	4000- 4160	-.003	51000-56000	.010
400- 600	.072	4160- 9000	-.014	56000-61000	.006
600- 800	.058	9000-15000	-.017	61000-66000	.004
800-1000	.039	15000-21000	-.016	66000-69330	.002

TABLE II. BALLISTIC FACTORS  
NIKE-HYDAC STV, SR-076

AERO- VANE NO. *	MEAN WIND COMPONENTS IN MILES PER HOUR											
	1 0520 MDT		2 0530 MDT		3 0545 MDT		4 0610 MDT		5 0620 MDT		6 0630 MDT	
	N-S	E-W	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	2.0S	2.0E	4.0S	8.0E	3.0S	4.0E	3.0S	7.0E	3.0S	6.0E
2	2.0S	0.0	4.0	4.0	7.0	8.0	3.0	10.0	4.0	10.0	10.0	14.0
3	3.0	2.0E	4.0	6.0	6.0	8.0	5.0	13.0	3.0	16.0	8.0	16.0
4	4.0	3.0	5.0	5.0	7.0	8.0	6.0	13.0	4.0	16.0	8.0	16.0
5	4.0	3.0	5.0	5.0	6.0	8.0	6.0	13.0	4.0	16.0	8.0	16.0

TABLE III. ANEMOMETER WIND SPEED AND DIRECTION  
NIKE-HYDAC STV, SR-076

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN MILES PER HOUR											
	1 0520 MDT		2 0530 MDT		3 0545 MDT		4 0610 MDT		5 0620 MDT		6 0630 MDT	
	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	5.0S	3.5E	5.0S	4.5E	6.0S	7.5E	6.5S	13.0E	4.5S	16.5E	8.5S	16.0E
300-400	6.5	5.5	5.0	4.0	5.5	7.0	7.0	12.5	5.5	17.0	10.5	16.5
400-600	9.0	3.5	5.0	2.5	5.0	6.0	8.0	13.5	8.0	17.0	12.5	18.5
600-800	8.0	2.0	5.5	2.5	4.0	6.0	7.5	10.5	9.5	14.5	13.5	17.5
800-1000	6.0	3.0	6.0	3.5	2.5	6.0	3.0	7.0	5.5	12.0	12.0	15.5
1000-1400	3.0	2.5	6.0	1.0	5.0	5.0	2.5	5.0	2.0	5.5	6.0	6.0
1400-2000	7.0	1.0W	9.5	1.0	10.0	3.0	4.5	1.0	3.5	2.0	4.5	2.0
2000-2500	12.5	2.5E	13.5	2.5	11.5	3.0	10.5	2.0	8.5	2.5	7.0	1.0
2500-3000	18.5	6.0	20.0	6.0	19.0	5.0	16.0	6.5	14.5	5.0	13.0	2.0
3000-3500	16.5	7.5	19.0	6.5	21.0	5.0	17.0	7.0	16.5	4.0	17.0	7.0
3500-4000	16.0	4.5	19.0	0.5	18.0	2.0	16.0	1.5	12.0	2.0	15.0	4.5

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA  
NIKE-HYDAC STV, SR-076

LAYERS IN FEET ABOVE GROUND	MEAN WIND COMPONENTS IN KNOTS					
	<sup>1</sup> 0330 MDT		<sup>2</sup> 0630 MDT		N-S	E-W
	N-S	E-W	N-S	E-W		
4000-4160	8.0S	0.0	14.0S	2.5E		
4160-9000	12.0	7.0W	16.0	6.0W		
9000-15000	7.0	19.5	11.0	19.0		
15000-21000	12.5	21.5	13.5	23.5		
21000-26000	10.0	27.0	18.0	31.0		
26000-31770	16.0	44.0	14.0	38.5		
31770-36000	10.0	56.0	10.5	59.0		
36000-41000	9.0	52.0	10.0	56.0		
41000-46000	8.5	47.5	9.0	51.0		
46000-51000	0.0	38.0	0.0	34.0		
51000-56000	3.5N	19.5	6.0N	17.0		
56000-61000	7.5	20.5	2.5	13.0		
61000-66000	6.5S	11.0	5.0S	8.5		
66000-69330	6.0	2.5	4.0	1.5		

TABLE V RAWINSONDE-MEASURED WIND DATA  
NIKE-HYDAC STV, SR-076

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION N.J. 823

SIGNIFICANT LEVEL DATA  
 0658003903  
 WHITE SANDS SITE  
 TABLE VI

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

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
882.5	3989.0	12.2	67.0
868.0	4450.1	14.0	62.0
829.0	5719.7	11.7	61.0
804.0	6562.8	12.4	53.0
779.0	7430.4	10.5	51.0
755.0	8290.2	12.6	44.0
653.0	12227.8	3.5	54.0
629.0	13221.4	0.3	64.0
622.0	13517.0	1.3	20.0
613.0	13903.2	2.5	23.0
514.0	16516.4	-5.1	24.0
400.0	24822.5	-19.2	29.0
328.0	29581.3	-29.5	28.0
284.0	32901.8	-38.6	31.0
217.0	38812.9	-52.1	-0. **
162.0	44673.7	-64.4	-0. **
140.0	47796.8	-67.0	-0. **
120.0	50819.5	-73.2	-0. **
105.0	53403.8	-72.4	-0. **
100.0	54353.0	-71.2	-0. **
85.0	56621.4	-72.2	-0. **
84.0	57740.5	-73.6	-0. **
64.0	63138.2	-62.0	-0. **
35.0	75643.6	-55.8	-0. **
27.0	81121.3	-54.5	-0. **
24.5	83191.2	-52.0	-0. **
20.0	87531.1	-52.9	-0. **
13.5	96031.1	-47.2	-0. **

\*\* RELATIVE HUMIDITY NOT SUPPLIED. ZERO VALUE ASSUMED FOR COMPUTATIONS.

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 823

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

TABLE VII

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	
3989.0	882.6	12.2	6.3	67.0	1073.3	659.1	210.0	1.9	1.000283
4000.0	882.2	12.2	6.3	66.9	1072.7	659.1	209.7	2.0	1.000283
4500.0	866.4	13.9	6.8	62.0	1047.1	661.1	197.4	4.6	1.000279
5000.0	850.9	13.0	5.8	61.6	1031.8	660.0	185.0	7.2	1.000273
5500.0	835.6	12.1	4.9	61.2	1016.7	658.9	172.7	9.8	1.000267
6000.0	820.6	11.9	4.1	58.3	999.1	658.7	160.4	12.4	1.000261
6500.0	805.8	12.3	3.2	53.6	979.9	659.1	161.2	12.0	1.000254
7000.0	791.3	11.4	2.0	52.0	965.5	658.0	166.1	11.3	1.000248
7500.0	777.0	10.7	0.8	50.4	950.9	657.0	178.7	10.1	1.000242
8000.0	763.0	11.9	0.8	46.4	929.7	658.4	188.2	9.5	1.000237
8500.0	749.2	12.1	0.4	44.5	912.1	658.7	195.7	9.2	1.000232
9000.0	735.5	11.0	-0.3	45.8	899.2	657.3	204.2	10.3	1.000228
9500.0	722.1	9.8	-0.9	47.1	886.5	656.0	212.0	11.4	1.000225
10000.0	708.9	8.6	-1.6	48.3	873.9	654.6	213.3	12.4	1.000221
10500.0	695.9	7.5	-2.4	49.6	861.6	653.2	215.1	13.1	1.000217
11000.0	683.2	6.3	-3.1	50.9	849.4	651.8	217.9	13.6	1.000213
11500.0	670.8	5.2	-3.8	52.2	837.5	650.5	221.3	14.4	1.000209
12000.0	658.5	4.0	-4.6	53.4	825.7	649.1	225.1	15.4	1.000205
12500.0	646.3	2.6	-5.1	56.7	814.6	647.4	231.9	16.9	1.000202
13000.0	634.3	1.0	-5.5	61.8	804.1	645.5	237.5	18.2	1.000200
13500.0	622.4	1.2	-17.9	22.5	789.6	645.3	240.9	19.3	1.000183
14000.0	610.7	2.3	-16.7	23.0	771.6	646.6	243.3	20.0	1.000180
14500.0	599.2	1.5	-17.4	23.1	759.3	645.6	245.3	20.4	1.000177
15000.0	587.9	0.7	-18.0	23.2	747.2	644.7	245.8	20.7	1.000174
15500.0	576.7	-0.1	-18.7	23.3	735.3	643.7	246.0	21.0	1.000171
16000.0	565.8	-1.0	-19.3	23.5	723.6	642.7	244.7	21.4	1.000168
16500.0	555.1	-1.8	-20.0	23.6	712.1	641.7	243.7	22.0	1.000165
17000.0	544.6	-2.6	-20.6	23.7	700.8	640.7	243.5	22.8	1.000162
17500.0	534.3	-3.4	-21.3	23.8	689.7	639.7	242.6	23.4	1.000159
18000.0	524.2	-4.2	-21.9	23.9	678.7	638.8	241.1	23.9	1.000157

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68 0330 HRS MDT  
 ASCENSION NO. 823

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

TABLE VII (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE						
18500.0	514.3	-5.1	-22.6	24.0	668.0	637.8	240.5	24.3	1.000154
19000.0	504.2	-6.2	-23.4	24.4	657.6	636.4	240.3	24.5	1.000151
19500.0	494.3	-7.3	-24.1	24.8	647.4	635.1	240.6	24.7	1.000149
20000.0	484.6	-8.4	-24.9	25.2	637.3	633.7	240.9	24.9	1.000146
20500.0	475.0	-9.5	-25.7	25.6	627.4	632.4	241.1	25.6	1.000144
21000.0	465.7	-10.7	-26.5	26.0	617.7	631.0	240.9	26.1	1.000141
21500.0	456.5	-11.8	-27.3	26.4	608.2	629.7	240.4	26.4	1.000139
22000.0	447.5	-12.9	-28.2	26.8	598.8	628.3	239.3	26.4	1.000137
22500.0	438.7	-14.0	-29.0	27.2	589.5	627.0	238.0	26.3	1.000134
23000.0	430.1	-15.1	-29.8	27.6	580.5	625.6	237.9	25.9	1.000132
23500.0	421.6	-16.2	-30.6	28.0	571.5	624.2	237.9	25.4	1.000130
24000.0	413.3	-17.4	-31.5	28.3	562.7	622.9	238.3	25.6	1.000128
24500.0	405.2	-18.5	-32.3	28.7	554.1	621.5	238.7	25.9	1.000126
25000.0	397.0	-19.6	-33.2	29.0	545.4	620.1	240.2	26.2	1.000124
25500.0	388.9	-20.7	-34.2	28.9	536.4	618.8	241.8	26.5	1.000121
26000.0	380.8	-21.7	-35.2	28.8	527.6	617.5	243.6	27.1	1.000119
26500.0	373.0	-22.8	-36.2	28.6	519.0	616.1	245.4	27.7	1.000117
27000.0	365.3	-23.9	-37.2	28.5	510.5	614.8	247.5	28.3	1.000115
27500.0	357.7	-25.0	-38.2	28.4	502.2	613.5	249.6	29.0	1.000113
28000.0	350.4	-26.1	-39.2	28.3	494.0	612.1	250.8	31.1	1.000111
28500.0	343.1	-27.2	-40.2	28.2	485.9	610.8	252.1	33.1	1.000109
29000.0	336.0	-28.2	-41.2	28.1	478.0	609.4	252.9	34.8	1.000107
29500.0	329.1	-29.3	-42.2	28.0	470.2	608.1	253.7	36.5	1.000106
30000.0	322.1	-30.6	-43.2	28.4	462.7	606.4	253.9	37.5	1.000104
30500.0	315.2	-32.0	-44.3	28.8	455.4	604.7	254.0	38.4	1.000102
31000.0	308.4	-33.4	-45.4	29.3	448.1	603.0	254.1	38.6	1.000100
31500.0	301.8	-34.8	-46.5	29.7	441.0	601.2	254.4	38.6	1.000099
32000.0	295.3	-36.1	-47.6	30.2	434.1	599.5	254.8	38.5	1.000097
32500.0	289.0	-37.5	-48.7	30.6	427.2	597.8	255.3	39.8	1.000096
33000.0	282.7	-38.8	-49.9	30.5**	420.4	596.1	255.8	42.2	1.000094

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 823

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

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

TABLE VII (Cont)

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	
33500.0	276.4	-40.0	-51.7	27.9**	412.9	594.6	256.4	44.4	1.000092
34000.0	270.2	-41.1	-53.5	25.2**	405.6	593.2	257.1	46.4	1.000091
34500.0	264.1	-42.3	-55.4	22.6**	398.5	591.7	256.8	48.7	1.000089
35000.0	258.1	-43.4	-57.4	20.0**	391.4	590.2	256.6	51.0	1.000087
35500.0	252.3	-44.5	-59.5	17.4**	384.5	588.8	256.4	53.7	1.000086
36000.0	246.6	-45.7	-61.7	14.8**	377.8	587.3	256.2	56.2	1.000084
36500.0	241.1	-46.8	-64.1	12.1**	371.1	585.8	255.9	58.1	1.000083
37000.0	235.7	-48.0	-66.8	9.5**	364.6	584.3	255.6	59.9	1.000081
37500.0	230.4	-49.1	-70.0	6.9**	358.2	582.8	255.3	61.1	1.000080
38000.0	225.2	-50.2	-74.1	4.3**	352.0	581.3	255.1	62.1	1.000078
38500.0	220.1	-51.4	-81.0	1.6**	345.8	579.9	255.5	60.0	1.000077
39000.0	215.1	-52.5	0.	-0. **	339.5	578.4	256.0	57.9	1.000076
39500.0	209.9	-53.5	0.	-0. **	333.0	577.1	256.9	57.5	1.000074
40000.0	204.9	-54.5	0.	-0. **	326.6	575.8	257.7	57.1	1.000073
40500.0	200.0	-55.5	0.	-0. **	320.3	574.4	258.3	57.8	1.000071
41000.0	195.3	-56.5	0.	-0. **	314.1	573.1	258.8	58.1	1.000070
41500.0	190.6	-57.6	0.	-0. **	308.1	571.7	259.5	56.7	1.000069
42000.0	186.1	-58.6	0.	-0. **	302.1	570.4	260.1	55.0	1.000067
42500.0	181.6	-59.6	0.	-0. **	296.3	569.0	260.7	52.5	1.000066
43000.0	177.3	-60.6	0.	-0. **	290.7	567.7	260.8	50.6	1.000065
43500.0	173.1	-61.6	0.	-0. **	285.1	566.3	259.7	50.4	1.000063
44000.0	169.0	-62.6	0.	-0. **	279.6	565.0	258.7	50.1	1.000062
44500.0	164.9	-63.6	0.	-0. **	274.3	563.6	258.0	49.5	1.000061
45000.0	161.0	-64.5	0.	-0. **	268.8	562.4	257.0	49.5	1.000060
45500.0	157.0	-65.0	0.	-0. **	262.8	561.8	255.4	51.9	1.000059
46000.0	153.1	-65.4	0.	-0. **	256.8	561.2	253.8	54.3	1.000057
46500.0	149.4	-65.8	0.	-0. **	251.0	560.6	254.0	50.4	1.000056
47000.0	145.7	-66.3	0.	-0. **	245.4	560.0	254.2	46.4	1.000055
47500.0	142.1	-66.7	0.	-0. **	239.8	559.4	254.9	45.5	1.000053
48000.0	138.6	-67.4	0.	-0. **	234.6	558.5	255.6	45.4	1.000052

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



UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSIN NJ. 823

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

TABLE VII (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED UF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
48500.0	125.1	-66.4	-0.	229.9	557.1	256.1	44.8	1.000051
49000.0	131.7	-69.5	-0.	225.2	555.7	256.5	43.8	1.000050
49500.0	128.4	-70.5	-0.	220.7	554.3	257.3	43.5	1.000049
50000.0	125.1	-71.5	-0.	216.2	552.9	259.0	45.4	1.000048
50500.0	122.0	-72.5	-0.	211.8	551.5	260.7	47.2	1.000047
51000.0	118.9	-73.1	-0.	207.1	550.7	262.0	47.4	1.000046
51500.0	115.8	-73.0	-0.	201.7	550.9	263.1	47.3	1.000045
52000.0	112.9	-72.8	-0.	196.4	551.1	264.3	46.7	1.000044
52500.0	110.0	-72.7	-0.	191.2	551.3	265.6	44.0	1.000043
53000.0	107.2	-72.5	-0.	186.2	551.5	266.9	41.4	1.000041
53500.0	104.5	-72.3	-0.	181.2	551.9	267.9	38.4	1.000040
54000.0	101.8	-71.6	-0.	176.1	552.7	268.7	35.1	1.000039
54500.0	99.2	-71.3	-0.	171.3	553.3	269.4	31.7	1.000038
55000.0	96.7	-71.5	-0.	167.1	553.0	269.1	27.3	1.000037
55500.0	94.3	-71.7	-0.	163.1	552.7	268.9	23.0	1.000036
56000.0	91.9	-71.9	-0.	159.1	552.3	271.7	20.3	1.000035
56500.0	89.6	-72.1	-0.	155.2	552.0	275.9	18.3	1.000034
57000.0	87.3	-72.7	-0.	151.7	551.3	279.8	16.7	1.000034
57500.0	85.1	-73.3	-0.	148.3	550.5	283.5	16.0	1.000033
58000.0	82.9	-73.0	-0.	144.4	550.8	287.2	15.3	1.000032
58500.0	80.8	-72.0	-0.	140.0	552.3	289.7	16.5	1.000031
59000.0	78.8	-70.9	-0.	135.8	553.8	292.2	17.7	1.000030
59500.0	76.9	-69.8	-0.	131.7	555.2	297.6	18.1	1.000029
60000.0	75.0	-68.7	-0.	127.8	556.7	304.7	17.9	1.000028
60500.0	73.1	-67.7	-0.	123.9	558.2	311.2	17.7	1.000028
61000.0	71.3	-66.6	-0.	120.2	559.6	316.1	17.0	1.000027
61500.0	69.5	-65.5	-0.	116.6	561.1	320.9	16.4	1.000026
62000.0	67.8	-64.4	-0.	113.1	562.5	316.8	14.4	1.000025
62500.0	66.1	-63.4	-0.	109.8	564.0	311.2	12.3	1.000024
63000.0	64.4	-62.5	-0.	106.5	565.4	298.2	10.8	1.000024

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68 0330 HRS MDT  
 ASCENSION NO. 823

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

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

TABLE VII. (Cont)

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					
63500.0	62.9	-61.8	0.	-0.	103.7	566.0	277.5	1.000023
64000.0	61.4	-61.6	0.	-0.	101.1	566.4	257.7	1.000023
64500.0	59.9	-61.3	0.	-0.	98.6	566.7	244.7	1.000022
65000.0	58.5	-61.1	0.	-0.	96.1	567.0	231.8	1.000021
65500.0	57.1	-60.8	0.	-0.	93.7	567.4	229.7	1.000021
66000.0	55.7	-60.6	0.	-0.	91.4	567.7	233.1	1.000020
66500.0	54.4	-60.3	0.	-0.	89.1	568.0	235.3	1.000020
67000.0	53.1	-60.1	0.	-0.	86.9	568.4	233.9	1.000019
67500.0	51.9	-59.8	0.	-0.	84.7	568.7	232.5	1.000019
68000.0	50.6	-59.6	0.	-0.	82.6	569.0	232.5	1.000018
68500.0	49.4	-59.3	0.	-0.	80.5	569.4	232.9	1.000018
69000.0	48.2	-59.1	0.	-0.	78.5	569.7	232.8	1.000017
69500.0	47.1	-58.8	0.	-0.	76.5	570.0	231.3	1.000017
70000.0	46.0	-58.6	0.	-0.	74.6	570.3	229.8	1.000017
70500.0	44.9	-58.4	0.	-0.	72.8	570.7	266.2	1.000016
71000.0	43.8	-58.1	0.	-0.	71.0	571.0	316.0	1.000016
71500.0	42.7	-57.9	0.	-0.	69.2	571.3	359.9	1.000015
72000.0	41.7	-57.6	0.	-0.	67.5	571.7	20.2	1.000015
72500.0	40.7	-57.4	0.	-0.	65.8	572.0	40.6	1.000015
73000.0	39.8	-57.1	0.	-0.	64.1	572.3	90.9	1.000014
73500.0	38.8	-56.9	0.	-0.	62.5	572.6	156.9	1.000014
74000.0	37.9	-56.6	0.	-0.	61.0	573.0	212.0	1.000014
74500.0	37.0	-56.4	0.	-0.	59.4	573.3	187.0	1.000013
75000.0	36.1	-56.1	0.	-0.	58.0	573.6	162.0	1.000013
75500.0	35.2	-55.9	0.	-0.	56.5	574.0	153.9	1.000013
76000.0	34.4	-55.7	0.	-0.	55.1	574.2	158.3	1.000012
76500.0	33.6	-55.6	0.	-0.	53.8	574.3	162.7	1.000012
77000.0	32.8	-55.5	0.	-0.	52.5	574.5	165.0	1.000012
77500.0	32.1	-55.4	0.	-0.	51.3	574.6	167.2	1.000011
78000.0	31.3	-55.2	0.	-0.	50.1	574.8	165.3	1.000011

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

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68 0330 HRS MDT  
 ASCENSION NO. 823

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

TABLE VII (Cont)

GEOMETRICAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
78500.0	30.6	-55.1	0.	-0. **	48.9	574.9	158.4	4.6	1.000011
79000.0	29.9	-55.0	0.	-0. **	47.7	575.1	151.4	3.3	1.000011
79500.0	29.2	-54.9	0.	-0. **	46.5	575.3	142.4	2.5	1.000010
80000.0	28.5	-54.8	0.	-0. **	45.4	575.4	133.2	1.8	1.000010
80500.0	27.8	-54.6	0.	-0. **	44.3	575.6	122.0	2.1	1.000010
81000.0	27.2	-54.5	0.	-0. **	43.3	575.7	107.2	4.3	1.000010
81500.0	26.5	-54.0	0.	-0. **	42.2	576.4	92.3	6.5	1.000009
82000.0	25.9	-53.4	0.	-0. **	41.1	577.2	88.3	7.4	1.000009
82500.0	25.3	-52.8	0.	-0. **	40.0	578.0	86.9	8.0	1.000009
83000.0	24.7	-52.2	0.	-0. **	39.0	578.7	85.4	8.9	1.000009
83500.0	24.1	-52.1	0.	-0. **	38.1	579.0	83.3	10.8	1.000008
84000.0	23.6	-52.2	0.	-0. **	37.2	578.8	81.3	12.7	1.000008
84500.0	23.0	-52.3	0.	-0. **	36.4	578.7	81.5	13.5	1.000008
85000.0	22.5	-52.4	0.	-0. **	35.5	578.6	83.0	13.7	1.000008
85500.0	22.0	-52.5	0.	-0. **	34.7	578.4	85.2	13.8	1.000008
86000.0	21.5	-52.6	0.	-0. **	33.9	578.3	97.4	13.0	1.000008
86500.0	21.0	-52.7	0.	-0. **	33.2	578.2	109.6	12.1	1.000007
87000.0	20.5	-52.8	0.	-0. **	32.4	578.0	114.0	12.5	1.000007
87500.0	20.0	-52.9	0.	-0. **	31.7	577.9	110.6	14.0	1.000007
88000.0	19.6	-52.6	0.	-0. **	30.9	578.3	107.2	15.5	1.000007
88500.0	19.1	-52.3	0.	-0. **	30.2	578.7	103.1	15.2	1.000007
89000.0	18.7	-51.9	0.	-0. **	29.4	579.2	98.9	14.7	1.000007
89500.0	18.3	-51.6	0.	-0. **	28.7	579.6	95.2	14.1	1.000006
90000.0	17.8	-51.2	0.	-0. **	28.0	580.0	93.0	13.3	1.000006
90500.0	17.4	-50.9	0.	-0. **	27.3	580.5	90.7	12.5	1.000006
91000.0	17.0	-50.6	0.	-0. **	26.7	580.9	96.2	11.3	1.000006
91500.0	16.6	-50.2	0.	-0. **	26.0	581.4	106.3	9.9	1.000006
92000.0	16.3	-49.9	0.	-0. **	25.4	581.8	116.3	8.4	1.000006
92500.0	15.9	-49.6	0.	-0. **	24.8	582.2			1.000006
93000.0	15.5	-49.2	0.	-0. **	24.2	582.7			1.000005

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68 0330 HRS MDT  
 ASCENSION NJ. 823

UPPER AIR DATA  
 0658003903  
 WHITE SANDS SITE

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

TABLE VII (Cont)

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	
93500.0	15.2	-48.9	0.	-0. **	23.6	583.1				1.000005
94000.0	14.8	-48.6	0.	-0. **	23.0	583.5				1.000005
94500.0	14.5	-48.2	0.	-0. **	22.4	584.0				1.000005
95000.0	14.2	-47.9	0.	-0. **	21.9	584.4				1.000005
95500.0	13.8	-47.6	0.	-0. **	21.4	584.8				1.000005
96000.0	13.5	-47.2	0.	-0. **	20.8	585.3				1.000005

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASLENSION NJ. 823

MANDATORY LEVELS  
 0658003903  
 WHITE SANDS SITE

0330 HRS MDT

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

TABLE VIII

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBAKS	FLEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5029.	13.0	5.8	62.	184.3	7.4	
800.0	6697.	12.1	2.8	53.	162.0	11.8	
750.0	8469.	12.2	0.5	44.	195.3	9.2	
700.0	10352.	7.9	-2.1	49.	214.4	13.0	
650.0	12342.	3.1	-5.0	55.	229.9	16.4	
600.0	14459.	1.6	-17.3	23.	245.2	20.4	
550.0	16743.	-2.2	-20.3	24.	243.6	22.4	
500.0	19207.	-6.7	-23.7	25.	240.4	24.6	
450.0	21877.	-12.6	-27.9	27.	239.6	26.4	
400.0	24791.	-19.2	-32.9	29.	239.6	26.0	
350.0	28006.	-26.1	-39.2	28.	251.0	31.2	
300.0	31602.	-35.1	-46.8	30.	254.5	38.6	
250.0	35682.	-45.0	-60.4	16.**	256.3	55.0	
200.0	40457.	-55.5	0.	-0.**	258.3	57.9	
175.0	43213.	-61.2	0.	-0.**	260.1	50.5	
150.0	46313.	-65.8	0.	-0.**	254.0	51.0	
125.0	49904.	-71.6	0.	-0.**	259.1	45.5	
100.0	54207.	-71.2	0.	-0.**	269.2	32.8	
80.0	58516.	-71.5	0.	-0.**	290.6	16.9	
70.0	61140.	-65.8	0.	-0.**	319.2	16.6	
60.0	64253.	-61.3	0.	-0.**	246.0	9.4	
50.0	67981.	-59.5	0.	-0.**	232.7	12.4	
40.0	72588.	-57.2	0.	-0.**	69.9	2.4	
30.0	78593.	-55.0	0.	-0.**	152.9	3.6	
25.0	82429.	-52.5	0.	-0.**	85.2	8.3	
20.0	87162.	-52.9	0.	-0.**	110.4	14.1	
15.0	93309.	-48.7	0.	-0.**			

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824  
 0630 HRS MDT

SIGNIFICANT LEVEL DATA  
 0668003906  
 WHITE SANDS SITE

WSTM SITE COORDINATES  
 E 488,520 FEET  
 N 185,045 FEET

TABLE IX

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
882.6	3989.0	12.0	4.8	61.0
866.0	4513.5	14.0	5.7	57.0
786.0	7184.2	10.5	3.6	62.0
774.0	7605.9	10.9	3.2	59.0
766.0	7891.9	13.0	2.6	49.0
690.0	10758.6	9.4	-5.3	35.0
612.0	13978.5	1.1	-11.4	39.0
602.0	14413.4	0.5	-21.8	17.0
572.0	15759.4	-0.1	-21.6	18.0
523.0	18095.3	-4.7	-25.5	18.0
356.0	27677.4	-24.4	-42.0	18.0
299.0	31770.4	-35.2	-49.1	23.0
224.0	38193.4	-49.8	0.	-0. **
185.0	42228.8	-59.2	0.	-0. **
180.0	42794.6	-59.2	0.	-0. **
149.0	46634.0	-66.2	0.	-0. **
141.0	47737.8	-65.8	0.	-0. **
116.0	51587.4	-72.0	0.	-0. **
100.0	54491.6	-69.2	0.	-0. **
83.0	58138.5	-72.0	0.	-0. **
63.0	63623.3	-62.7	0.	-0. **
37.0	74656.6	-54.9	0.	-0. **
12.5	98065.0	-45.8	0.	-0. **
8.0	108016.3	-40.9	0.	-0. **

\*\* RELATIVE HUMIDITY NOT SUPPLIED. ZERO VALUE ASSUMED FOR COMPUTATIONS.

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824

UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE  
 TABLE X

WSTM 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 DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	882.6	12.0	61.0	1074.5	658.7	100.0	6.0	1.000279
4000.0	882.2	12.0	60.9	1073.9	658.8	100.3	6.0	1.000279
4500.0	866.4	13.9	57.1	1047.3	661.1	113.5	6.5	1.000275
5000.0	850.8	13.4	57.9	1030.6	660.4	126.7	7.0	1.000271
5500.0	835.5	12.7	58.8	1014.4	659.6	139.8	7.5	1.000266
6000.0	820.5	12.1	59.8	998.5	658.9	153.0	7.9	1.000262
6500.0	805.8	11.4	60.7	982.8	658.1	163.5	8.7	1.000257
7000.0	791.3	10.7	61.7	967.4	657.3	172.7	9.7	1.000253
7500.0	777.0	10.8	59.8	949.8	657.4	175.7	11.3	1.000248
8000.0	763.0	12.9	48.5	926.1	659.7	178.1	13.0	1.000240
8500.0	749.2	12.2	46.0	911.7	658.9	181.9	14.2	1.000234
9000.0	735.7	11.6	43.6	897.4	658.1	185.9	15.4	1.000228
9500.0	722.4	11.0	41.1	883.3	657.3	190.1	16.3	1.000222
10000.0	709.3	10.4	38.7	869.5	656.5	194.4	17.0	1.000217
10500.0	696.5	9.7	36.3	855.9	655.7	199.3	17.0	1.000211
11000.0	683.8	8.8	35.3	843.2	654.5	204.6	17.2	1.000207
11500.0	671.2	7.5	35.9	831.6	653.0	210.8	17.6	1.000203
12000.0	658.8	6.2	36.5	820.1	651.4	217.1	18.6	1.000200
12500.0	646.7	4.9	37.2	808.7	649.9	223.5	20.1	1.000196
13000.0	634.7	3.6	37.8	797.6	648.4	228.0	22.3	1.000192
13500.0	623.0	2.3	38.4	786.6	646.8	232.1	24.5	1.000189
14000.0	611.5	1.1	37.9	775.8	645.3	235.0	25.5	1.000185
14500.0	600.0	0.5	17.1	763.6	644.3	236.8	25.8	1.000176
15000.0	588.7	0.2	17.4	749.8	644.0	237.1	25.1	1.000172
15500.0	577.7	0.0	17.8	736.3	643.8	235.9	23.7	1.000170
16000.0	566.7	-0.6	18.0	723.9	643.1	234.0	21.9	1.000167
16500.0	556.0	-1.6	18.0	712.8	641.9	232.0	21.6	1.000164
17000.0	545.4	-2.5	18.0	701.8	640.7	230.1	21.4	1.000161
17500.0	535.1	-3.5	18.0	691.0	639.6	229.3	21.4	1.000158
18000.0	524.9	-4.5	18.0	680.4	638.4	229.4	21.5	1.000156

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824

UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE

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

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
18500.0	514.6	-5.5	18.0	669.6	697.2	231.6	21.6	1.000153
19000.0	504.3	-6.6	18.0	658.0	695.9	233.5	21.7	1.000150
19500.0	494.3	-7.6	18.0	648.2	694.7	235.0	21.6	1.000148
20000.0	484.5	-8.6	18.0	637.9	693.4	236.5	22.3	1.000145
20500.0	474.9	-9.6	18.0	627.6	692.2	238.0	23.3	1.000143
21000.0	465.4	-10.7	18.0	617.6	691.0	238.0	24.6	1.000140
21500.0	456.2	-11.7	18.0	607.7	629.7	237.6	26.0	1.000138
22000.0	447.1	-12.7	18.0	598.0	628.5	237.2	27.4	1.000135
22500.0	438.2	-13.8	18.0	588.4	627.2	236.9	28.7	1.000133
23000.0	429.5	-14.8	18.0	579.1	626.0	237.6	28.9	1.000131
23500.0	421.0	-15.8	18.0	569.8	624.7	238.2	29.1	1.000129
24000.0	412.6	-16.8	18.0	560.0	623.5	237.6	30.1	1.000127
24500.0	404.4	-17.9	18.0	551.0	622.2	237.0	31.1	1.000124
25000.0	396.4	-18.9	18.0	543.1	620.9	236.2	31.7	1.000122
25500.0	388.5	-19.9	18.0	534.4	619.7	235.3	32.3	1.000120
26000.0	380.8	-21.0	18.0	526.0	618.4	235.2	33.2	1.000118
26500.0	373.2	-22.0	18.0	517.6	617.2	235.2	34.2	1.000116
27000.0	365.8	-23.0	18.0	509.4	615.9	236.4	35.1	1.000115
27500.0	358.5	-24.0	18.0	501.4	614.6	237.7	36.1	1.000113
28000.0	351.1	-25.3	18.4	493.4	613.1	240.4	37.4	1.000111
28500.0	343.7	-26.6	19.0	485.6	611.5	242.9	38.8	1.000109
29000.0	336.5	-27.9	19.6	477.9	609.8	243.3	41.1	1.000107
29500.0	329.4	-29.2	20.2	470.4	608.2	243.9	43.0	1.000105
30000.0	322.4	-30.5	20.8	463.0	606.5	245.2	42.2	1.000104
30500.0	315.6	-31.8	21.4	455.7	604.9	246.2	41.5	1.000102
31000.0	309.0	-33.2	22.1	448.5	603.2	245.0	41.9	1.000100
31500.0	302.5	-34.5	22.7	441.5	601.5	243.9	42.3	1.000099
32000.0	295.9	-35.7	22.2**	434.2	600.0	244.8	42.4	1.000097
32500.0	289.4	-36.9	20.4**	426.6	598.6	245.8	42.5	1.000095
33000.0	282.9	-38.0	18.0**	419.2	597.1	246.2	44.5	1.000094

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



STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824

UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE

WSTM SITE COORDINATES  
 E 488,500 FEET  
 N 189,045 FEET

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE					SPEED KNOTS	RETRACTION	
33500.0	276.6	-39.1	-55.1	16.8**	411.8	595.7	246.5	47.3	1.000092	
34000.0	270.5	-40.3	-57.0	15.0**	404.6	594.2	247.7	49.4	1.000090	
34500.0	264.5	-41.4	-59.0	13.2**	397.6	592.8	249.7	51.1	1.000089	
35000.0	258.6	-42.5	-61.0	11.4**	390.7	591.3	251.0	53.0	1.000087	
35500.0	252.8	-43.7	-63.3	9.6**	383.9	589.8	250.8	55.3	1.000086	
36000.0	247.2	-44.8	-65.7	7.9**	377.2	588.4	250.6	57.4	1.000084	
36500.0	241.7	-46.0	-68.4	6.1**	370.7	586.9	250.7	59.0	1.000083	
37000.0	236.3	-47.1	-71.7	4.3**	364.3	585.4	250.0	60.5	1.000081	
37500.0	231.1	-48.2	-76.1	2.5**	358.0	584.0	251.7	60.5	1.000080	
38000.0	226.0	-49.4	-84.6	0.7**	351.8	582.5	252.5	60.4	1.000078	
38500.0	220.8	-50.5	0.	-0.	345.5	581.0	253.1	60.8	1.000077	
39000.0	215.6	-51.7	0.	-0.	339.2	579.5	253.7	61.3	1.000076	
39500.0	210.5	-52.8	0.	-0.	333.0	577.9	254.3	60.5	1.000074	
40000.0	205.6	-54.0	0.	-0.	326.9	576.4	254.9	59.6	1.000073	
40500.0	200.8	-55.2	0.	-0.	321.0	574.9	253.1	61.6	1.000071	
41000.0	196.1	-56.3	0.	-0.	315.1	573.3	250.9	64.1	1.000070	
41500.0	191.5	-57.5	0.	-0.	309.4	571.8	251.5	62.9	1.000069	
42000.0	187.0	-58.7	0.	-0.	303.8	570.3	252.7	60.9	1.000068	
42500.0	182.6	-59.2	0.	-0.	297.3	569.5	253.2	59.3	1.000066	
43000.0	178.2	-59.6	0.	-0.	290.7	569.0	253.5	57.8	1.000065	
43500.0	173.9	-60.5	0.	-0.	284.8	567.8	254.6	56.3	1.000063	
44000.0	169.6	-61.4	0.	-0.	279.1	566.6	256.1	54.9	1.000062	
44500.0	165.5	-62.3	0.	-0.	273.5	565.4	257.3	53.5	1.000061	
45000.0	161.5	-63.2	0.	-0.	268.0	564.2	255.6	52.5	1.000060	
45500.0	157.6	-64.1	0.	-0.	262.6	562.9	253.9	51.4	1.000058	
46000.0	153.7	-65.0	0.	-0.	257.4	561.7	253.6	51.8	1.000057	
46500.0	150.0	-66.0	0.	-0.	252.2	560.5	254.1	52.9	1.000056	
47000.0	146.3	-66.1	0.	-0.	246.1	560.3	254.6	53.8	1.000055	
47500.0	142.7	-65.9	0.	-0.	239.9	560.6	255.2	51.6	1.000053	
48000.0	139.1	-66.2	0.	-0.	234.3	560.1	255.8	49.5	1.000052	

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

UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68 0630 HRS MDT  
 ASCENSION NO. 824

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

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
48500.0	135.7	-67.0	0.	-0. **	229.3	559.0	257.1	48.8	1.000051	
49000.0	132.3	-67.8	0.	-0. **	224.4	557.9	258.7	48.9	1.000050	
49500.0	128.9	-68.6	0.	-0. **	219.7	556.8	260.7	48.0	1.000049	
50000.0	125.7	-69.4	0.	-0. **	215.0	555.7	263.6	44.2	1.000048	
50500.0	122.6	-70.2	0.	-0. **	210.5	554.6	266.5	40.4	1.000047	
51000.0	119.5	-71.1	0.	-0. **	206.0	553.5	265.9	40.4	1.000046	
51500.0	116.5	-71.9	0.	-0. **	201.7	552.4	264.9	40.9	1.000045	
52000.0	113.6	-71.6	0.	-0. **	196.3	552.8	264.8	40.9	1.000044	
52500.0	110.7	-71.1	0.	-0. **	190.9	553.5	265.5	40.4	1.000043	
53000.0	107.9	-70.6	0.	-0. **	185.7	554.1	266.2	39.9	1.000041	
53500.0	105.2	-70.2	0.	-0. **	180.6	554.8	264.5	39.2	1.000040	
54000.0	102.5	-69.7	0.	-0. **	175.6	555.4	262.9	38.6	1.000039	
54500.0	100.0	-69.2	0.	-0. **	170.8	556.1	264.5	36.1	1.000038	
55000.0	97.4	-69.6	0.	-0. **	166.8	555.5	269.4	32.0	1.000037	
55500.0	95.0	-70.0	0.	-0. **	162.9	555.0	274.3	27.8	1.000036	
56000.0	92.6	-70.4	0.	-0. **	159.1	554.5	279.2	24.0	1.000035	
56500.0	90.2	-70.7	0.	-0. **	155.3	554.0	284.1	20.2	1.000035	
57000.0	88.0	-71.1	0.	-0. **	151.7	553.4	288.6	17.7	1.000034	
57500.0	85.8	-71.5	0.	-0. **	148.2	552.9	292.3	17.9	1.000033	
58000.0	83.6	-71.9	0.	-0. **	144.7	552.4	295.9	18.0	1.000032	
58500.0	81.5	-71.4	0.	-0. **	140.7	553.1	288.8	21.2	1.000031	
59000.0	79.5	-70.5	0.	-0. **	136.7	554.2	278.7	25.3	1.000030	
59500.0	77.5	-69.7	0.	-0. **	132.7	555.4	279.1	26.5	1.000030	
60000.0	75.6	-68.8	0.	-0. **	128.9	556.6	298.5	22.8	1.000029	
60500.0	73.7	-68.0	0.	-0. **	125.2	557.7	318.0	19.1	1.000028	
61000.0	71.9	-67.1	0.	-0. **	121.6	558.9	321.3	16.7	1.000027	
61500.0	70.1	-66.3	0.	-0. **	118.1	560.0	324.5	14.3	1.000026	
62000.0	68.4	-65.5	0.	-0. **	114.7	561.2	343.6	13.6	1.000026	
62500.0	66.7	-64.6	0.	-0. **	111.4	562.3	12.2	13.8	1.000025	
63000.0	65.0	-63.8	0.	-0. **	108.2	563.4	26.1	13.8	1.000024	

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

UPPER AIR DATA  
0668003906  
WHITE SANDS SITE

STATION ALTITUDE 3989.0 FEET MSL  
10 OCT. 68 0630 HRS MDT  
ASCENSION NO. 824

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

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
63500.0	63.4	-62.9	-0. **	105.1	564.6	321.1	12.6	1.000023
64000.0	61.9	-62.4	-0. **	102.3	565.2	256.2	11.5	1.000023
64500.0	60.4	-62.1	-0. **	99.7	565.7	226.8	11.6	1.000022
65000.0	59.0	-61.7	-0. **	97.1	566.2	228.7	12.8	1.000022
65500.0	57.5	-61.4	-0. **	94.7	566.6	230.7	14.0	1.000021
66000.0	56.2	-61.0	-0. **	92.3	567.1	235.1	15.1	1.000021
66500.0	54.8	-60.7	-0. **	89.9	567.6	239.9	16.2	1.000020
67000.0	53.5	-60.3	-0. **	87.6	568.1	243.9	16.6	1.000020
67500.0	52.3	-60.0	-0. **	85.4	568.5	242.6	13.6	1.000019
68000.0	51.0	-59.6	-0. **	83.2	569.0	241.3	10.5	1.000019
68500.0	49.8	-59.3	-0. **	81.1	569.5	239.3	8.7	1.000018
69000.0	48.6	-58.9	-0. **	79.0	569.9	236.3	8.5	1.000018
69500.0	47.4	-58.5	-0. **	77.0	570.4	233.3	8.3	1.000017
70000.0	46.3	-58.2	-0. **	75.1	570.9	205.4	6.5	1.000017
70500.0	45.2	-57.8	-0. **	73.2	571.4	170.4	4.2	1.000016
71000.0	44.1	-57.5	-0. **	71.3	571.8	140.0	2.2	1.000016
71500.0	43.1	-57.1	-0. **	69.5	572.3	145.9	2.6	1.000015
72000.0	42.1	-56.8	-0. **	67.7	572.8	151.8	2.9	1.000015
72500.0	41.1	-56.4	-0. **	66.0	573.2	149.6	3.7	1.000015
73000.0	40.1	-56.1	-0. **	64.3	573.7	137.0	4.9	1.000014
73500.0	39.1	-55.7	-0. **	62.7	574.2	124.4	6.1	1.000014
74000.0	38.2	-55.4	-0. **	61.1	574.6	134.7	6.1	1.000014
74500.0	37.3	-55.0	-0. **	59.5	575.1	152.2	5.7	1.000013
75000.0	36.4	-54.8	-0. **	58.1	575.4	167.6	5.4	1.000013
75500.0	35.6	-54.6	-0. **	56.7	575.7	131.1	6.0	1.000013
76000.0	34.8	-54.4	-0. **	55.4	575.9	94.7	6.6	1.000012
76500.0	34.0	-54.2	-0. **	54.1	576.2	66.2	7.0	1.000012
77000.0	33.2	-54.0	-0. **	52.8	576.4	62.8	6.7	1.000012
77500.0	32.4	-53.8	-0. **	51.5	576.7	59.3	6.4	1.000011
78000.0	31.7	-53.6	-0. **	50.3	577.0	56.8	6.7	1.000011

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

STATION ALTITUDE 3989.0 FEET MSI.  
 10 OCT. 68 0630 HRS MDT  
 ASCENSION NO. 824

UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE

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

TABLE X (Cont)

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
78500.0	31.0	-53.4	0.	49.1	577.2	55.7	7.8	1.000011
79000.0	30.3	-53.2	0.	47.9	577.5	54.6	8.9	1.000011
79500.0	29.6	-53.0	0.	46.8	577.7	66.2	8.4	1.000010
80000.0	28.9	-52.8	0.	45.7	578.0	87.1	6.5	1.000010
80500.0	28.2	-52.6	0.	44.6	578.2	108.1	4.7	1.000010
81000.0	27.6	-52.4	0.	43.5	578.5	109.0	5.9	1.000010
81500.0	26.9	-52.2	0.	42.5	578.7	102.8	8.0	1.000009
82000.0	26.3	-52.0	0.	41.5	579.0	96.6	10.2	1.000009
82500.0	25.7	-51.9	0.	40.5	579.2	97.3	12.4	1.000009
83000.0	25.1	-51.7	0.	39.5	579.5	98.8	14.6	1.000009
83500.0	24.6	-51.5	0.	38.6	579.8	100.1	16.5	1.000009
84000.0	24.0	-51.3	0.	37.7	580.0	99.5	15.3	1.000008
84500.0	23.4	-51.1	0.	36.8	580.3	99.0	14.2	1.000008
85000.0	22.9	-50.9	0.	35.9	580.5	101.4	13.1	1.000008
85500.0	22.4	-50.7	0.	35.1	580.8	112.8	12.4	1.000008
86000.0	21.9	-50.5	0.	34.2	581.0	124.3	11.6	1.000008
86500.0	21.4	-50.3	0.	33.4	581.3	137.3	11.7	1.000007
87000.0	20.9	-50.1	0.	32.6	581.5	159.7	16.9	1.000007
87500.0	20.4	-49.9	0.	31.8	581.8	182.0	22.2	1.000007
88000.0	19.9	-49.7	0.	31.1	582.0	204.4	27.5	1.000007
88500.0	19.5	-49.5	0.	30.3	582.3	199.0	25.2	1.000007
89000.0	19.0	-49.3	0.	29.6	582.5	182.7	20.1	1.000007
89500.0	18.6	-49.1	0.	28.9	582.8	166.4	15.0	1.000006
90000.0	18.2	-48.9	0.	28.2	583.0	147.9	12.0	1.000006
90500.0	17.8	-48.7	0.	27.6	583.3	122.0	16.4	1.000006
91000.0	17.3	-48.5	0.	26.9	583.6	96.0	20.7	1.000006
91500.0	16.9	-48.4	0.	26.3	583.8	70.1	25.0	1.000006
92000.0	16.6	-48.2	0.	25.6	584.1	72.3	23.6	1.000006
92500.0	16.2	-48.0	0.	25.0	584.3	84.5	20.1	1.000006
93000.0	15.8	-47.8	0.	24.4	584.6	96.7	16.6	1.000005

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824  
 UPPER AIR DATA  
 0668003906  
 WHITE SANDS SITE  
 WSTM SITE COORDINATES  
 E 488,580 FEET  
 N 185,045 FEET

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE						
93500.0	15.4	-47.6	0.	-0. **	23.9	584.8	112.7	13.5	1.000005
94000.0	15.1	-47.4	0.	-0. **	23.3	585.1	140.1	11.6	1.000005
94500.0	14.7	-47.2	0.	-0. **	22.7	585.3	167.5	9.8	1.000005
95000.0	14.4	-47.0	0.	-0. **	22.2	585.6	194.9	7.9	1.000005
95500.0	14.1	-46.8	0.	-0. **	21.7	585.8	196.1	8.7	1.000005
96000.0	13.8	-46.6	0.	-0. **	21.2	586.1	188.7	10.5	1.000005
96500.0	13.4	-46.4	0.	-0. **	20.7	586.3	281.3	12.2	1.000005
97000.0	13.1	-46.2	0.	-0. **	20.2	586.6	165.8	15.8	1.000004
97500.0	12.8	-46.0	0.	-0. **	19.7	586.8	127.7	24.7	1.000004
98000.0	12.5	-45.8	0.	-0. **	19.2	587.1	89.7	33.6	1.000004
98500.0	12.3	-45.6	0.	-0. **	18.8	587.4	51.6	42.5	1.000004
99000.0	12.0	-45.3	0.	-0. **	18.3	587.7	30.7	36.6	1.000004
99500.0	11.7	-45.1	0.	-0. **	17.9	588.0	16.3	24.9	1.000004
100000.0	11.5	-44.8	0.	-0. **	17.5	588.3	2.0	13.3	1.000004
100500.0	11.2	-44.6	0.	-0. **	17.1	588.7	346.4	3.7	1.000004
101000.0	11.0	-44.4	0.	-0. **	16.7	589.0	322.2	8.2	1.000004
101500.0	10.7	-44.1	0.	-0. **	16.3	589.3	298.1	12.8	1.000004
102000.0	10.5	-43.9	0.	-0. **	15.9	589.6	273.9	17.3	1.000004
102500.0	10.2	-43.6	0.	-0. **	15.6	589.9	258.4	20.8	1.000003
103000.0	10.0	-43.4	0.	-0. **	15.2	590.2	251.0	23.5	1.000003
103500.0	9.8	-43.1	0.	-0. **	14.8	590.6	243.5	26.1	1.000003
104000.0	9.6	-42.9	0.	-0. **	14.5	590.9	236.1	28.7	1.000003
104500.0	9.4	-42.6	0.	-0. **	14.2	591.2			1.000003
105000.0	9.2	-42.4	0.	-0. **	13.8	591.5			1.000003
105500.0	9.0	-42.1	0.	-0. **	13.5	591.8			1.000003
106000.0	8.8	-41.9	0.	-0. **	13.2	592.1			1.000003
106500.0	8.6	-41.6	0.	-0. **	12.9	592.4			1.000003
107000.0	8.4	-41.4	0.	-0. **	12.6	592.8			1.000003
107500.0	8.2	-41.2	0.	-0. **	12.3	593.1			1.000003
108000.0	8.0	-40.9	0.	-0. **	12.0	593.4			1.000003

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

STATION ALTITUDE 3989.0 FEET MSL  
 10 OCT. 68  
 ASCENSION NO. 824

MANDATORY LEVELS  
 0668003906  
 WHITE SANDS SITE

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

TABLE XI

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA		
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5028.	13.3	5.3	58.	127.4	7.0	
800.0	6697.	11.1	4.0	61.	167.2	9.1	
750.0	8470.	12.3	1.1	46.	181.7	14.2	
700.0	10360.	9.9	-4.1	37.	198.0	17.0	
650.0	12365.	5.3	-8.3	37.	221.8	19.7	
600.0	14489.	0.5	-21.8	17.	236.8	25.8	
550.0	16771.	-2.1	-23.3	18.	230.8	21.5	
500.0	19233.	-7.0	-27.4	18.	234.2	21.6	
450.0	21901.	-12.4	-31.9	18.	237.3	27.2	
400.0	24820.	-18.4	-37.0	18.	236.4	31.5	
350.0	28045.	-25.5	-42.7	18.	240.8	37.6	
300.0	31644.	-35.0	-49.0	23.	244.2	42.4	
250.0	35736.	-44.2	-64.4	9.**	250.6	56.6	
200.0	40524.	-55.4	0.	-0.**	252.6	62.1	
175.0	43282.	-60.2	0.	-0.**	254.2	56.6	
150.0	46394.	-66.0	0.	-0.**	254.1	52.9	
125.0	50004.	-69.6	0.	-0.**	264.3	43.2	
100.0	54346.	-69.2	0.	-0.**	264.4	36.3	
80.0	58686.	-70.8	0.	-0.**	281.7	24.0	
70.0	61312.	-66.3	0.	-0.**	324.5	14.3	
60.0	64414.	-62.0	0.	-0.**	227.2	11.9	
50.0	68137.	-59.3	0.	-0.**	240.1	8.8	
40.0	72757.	-56.0	0.	-0.**	136.7	4.9	
30.0	78805.	-53.1	0.	-0.**	54.4	9.2	
25.0	82673.	-51.6	0.	-0.**	98.8	14.6	
20.0	87443.	-49.7	0.	-0.**	195.9	25.5	
15.0	93653.	-47.3	0.	-0.**	144.2	11.4	
10.0	102525.	-43.3	0.	-0.**	250.5	23.6	

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

RELEASE TIME (MDT)	SECOND-STAGE IMPACT DISPLACEMENT IN MILI'S DUE TO WIND										AZI- MUTH (DEG- REES)	THEORETICAL IMPACT FROM LAUNCHER (IN MILES)		
	15-216 FT		216-4000 FT		4000-69330 FT		TOTAL			RANGE		N-S	E-W	
	N-S	E-W	N-S	E-W	N-S	E-W	N-S	E-W						
0330	1 3S	0.8E	10.2S	3.8E	3.2S	30.6W	14.7S	26.0W	347.8	72.8	71.2N	15.5W		
0330	2.9S	3.1E	10.2S	3.5E	3.2S	30.6W	16.3S	24.0W	349.0	70.9	69.6N	13.5W		
0330	4.7S	6.6E	9.2S	6.9E	3.2S	30.6W	17.1S	17.1W	354.5	69.1	68.8N	6.6W		
0330	3.3S	7.3E	9.1S	10.4E	3.2S	30.6W	15.6S	12.9W	358.0	70.3	70.3N	2.4W		
0330	2.9S	9.2E	8.4S	12.8E	3.2S	30.6W	14.5S	8.6W	001.5	71.4	71.4N	1.9E		
0330	5.5S	9.7E	12.2S	14.2E	3.2S	30.6W	20.9S	6.7W	003.3	65.1	65.0N	3.8E		
0630	5.5S	9.7E	12.2S	14.2E	2.8S	32.5W	20.5S	8.6W	001.7	65.4	65.4N	1.9E		

	AZI- MUTH (DEG- REES)	MILES FROM LAUNCHER	
		RANGE	N-S E-W
LAUNCHER SETTING (ELEVATION 84.0 DEGREES QE)	010.0	87.2	85.9N 15.4E
NO WIND IMPACT	007.0	86.5	85.9N 10.5E
PREDICTED SECOND-STAGE IMPACT	357.0	70.0	69.9N 3.7W
SECOND-STAGE IMPACT, RADAR TRACK	015.7	84.4	81.2N 22.8E
PREDICTED BOOSTER IMPACT	040.0	1.5	1.1N 1.0E
ACTUAL BOOSTER IMPACT	N/A	N/A	N/A N/A

TABLE XII. IMPACT PREDICTION DATA  
NIKE-HYDAC STV, SR-076

**BLANK PAGE**



UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D .

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

1. ORIGINATING ACTIVITY (Corporate author) U. S. Army Electronics Command Ft. Monmouth, New Jersey		2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED	
		2b. GROUP	
3. REPORT TITLE METEOROLOGICAL DATA REPORT, NIKE-HYDAC STV, SR-076			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
5. AUTHOR(S) (First name, middle initial, last name) Len E. Carter			
6. REPORT DATE November 1968		7a. TOTAL NO. OF PAGES 32	7b. NO. OF REFS NONE
8a. CONTRACT OR GRANT NO.		9a. ORIGINATOR'S REPORT NUMBER(S) DR-369	
b. PROJECT NO.		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
c. DA Task 1T665702D127-02			
d.			
10. DISTRIBUTION STATEMENT This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of Atmospheric Sciences Research Office, White Sands Missile Range, New Mexico.			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY U. S. Army Electronics Command Atmospheric Sciences Research Office White Sands Missile Range, New Mexico	
13. ABSTRACT  Meteorological data gathered for the launching of Nike-Hydac STV, SR-076, are presented for the Space and Missile Systems Organization, Greenbelt, Maryland, and for ballistic studies. The data appear, along with calculated ballistic data, in tabular form.			

DD FORM 1473  
1 NOV 66

REPLACES DD FORM 1473, 1 JAN 64, WHICH IS OBSOLETE FOR ARMY USE.

UNCLASSIFIED

Security Classification

UNCLASSIFIED

Security Classification

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

UNCLASSIFIED

Security Classification