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DR-524
May 1970

AD

21

METEOROLOGICAL DATA REPORT

AF03702 HONEST JOHN
MISSILE NO. 620, ROUND NO. 602 AML
(6 May 1970)

BY

METEOROLOGICAL SUPPORT TECHNICAL AREA

ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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METEOROLOGICAL DATA REPORT

**AF03702 HONEST JOHN
MISSILE NO. 620, ROUND NO. 602 AML
(6 May 1970)**

By

Meteorological Support Technical Area

DR-524

May 1970

DA Task 1T665702D127-02

**ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO**

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ABSTRACT

Meteorological data gathered for the launching of AF03702 Honest John, Missile Number 620, Round Number 602 AML, are presented in tabular form.

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INTRODUCTION

AF03702 Honest John, Missile Number 620, Round Number 602 AML, was launched from CP-7, White Sands Missile Range (WSMR), New Mexico, at 0715 MDT, 6 May 1970. The scheduled launch time was 0715 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the Meteorological Support Technical Area, Atmospheric Sciences Office (ASO), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	4,840	FEET/MSL
PRESSURE	854.6	MBS
TEMPERATURE	11.4	°C
RELATIVE HUMIDITY	41	%
DEW POINT	-1.4	°C
DENSITY	1,047	GM/M ³

TABLE I. SURFACE OBSERVATIONS TAKEN AT 0715 MDT/
6 MAY 1970, AT CP-7.

INTRODUCTION

AF03702 Honest John, Missile Number 620, Round Number 602 AML, was launched from CP-7, White Sands Missile Range (WSMR), New Mexico, at 0715 MDT, 6 May 1970. The scheduled launch time was 0715 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the Meteorological Support Technical Area, Atmospheric Sciences Office (ASO), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION		
PRESSURE	859.0	MBS
TEMPERATURE	16.7	°C
RELATIVE HUMIDITY	30.0	%
DEW POINT	-1.1	°C
DENSITY		GM/M ³

TABLE II. SURFACE OBSERVATIONS TAKEN AT 0730 MDT/
6 MAY 1970, AT AFSWC TGT #1.

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	171	7.0
100	156	5.0
200	136	4.5
300	125	4.5
400	132	5.5
500	155	7.0
600	163	9.5
700	166	10.0
800	171	12.0
900	175	13.0
1000	180	14.5
1100	176	16.0
1200	173	17.0
1300	169	19.5
1400	169	21.0
1500	167	23.0

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
1600	169	25.5
1700	168	27.5
1800	169	30.5
1900	171	34.0
2000	168	37.0
2100	167	37.0
2200	167	40.0
2300	167	40.0
2400	166	39.0
2500	166	37.0
2600	167	38.5
2700	167	38.5
2800	169	36.0
2900	170	36.5
3000	171	37.0

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM CP-7, AT 0714:30 MDT/6 MAY 1970
AFO3702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WSM COORDINATES:

X = 406,122.94 Y = 693,918.11 Z = 4,844.64

APPROXIMATELY: ONE TENTH (1/10) MILE NORTH OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 167.0°

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	118	4.0
500	053	8.0
1000	017	9.0
1500	010	11.0
2000	005	11.0
2500	007	14.0
3000	007	16.0
3500	007	20.0
4000	008	20.0
4500	011	21.0
5000	010	21.0
5500	017	19.0
6000	030	16.0
6500	031	15.0
7000	031	16.0
7500	038	12.0
8000	038	15.0

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM CP-17, AT 0645 MDT/6 MAY 1970
AF03702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WSTM COORDINATES:

X = 413,576.24 Y = 665,015.33 Z = 4,746.53

APPROXIMATELY: 5 MILES SOUTH OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 167.0°

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)	HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	CALM	0.0	2100	170	18.0
100	180	2.0	2200	170	18.0
200	180	4.0	2300	170	18.0
300	180	5.0	2400	170	19.0
400	180	6.0	2500	170	19.0
500	180	8.0	2600	170	19.0
600	180	10.0	2700	170	19.0
700	180	11.0	2800	175	19.0
800	175	11.0	2900	180	19.0
900	175	10.0	3000	185	19.0
1000	175	10.0	3100		
1100	170	10.0	3200		
1200	170	10.0	3300		
1300	165	11.0	3400		
1400	165	13.0	3500	200	22.0
1500	165	15.0	3600		
1600	165	17.0	3700		
1700	170	18.0	3800		
1800	170	18.0	3900		
1900	170	18.0	4000	200	23.0
2000	170	18.0	4100		

TABLE V. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 38
RELEASED FROM AFSWC TGT #1, AT 0730 MDT/6 MAY 1970
AFO3702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WTM COORDINATES:

X = 424,568.33 Y = 638,753.98 EL = 4,694.33 FT.

APPROXIMATELY: 5 MILES SOUTHEAST OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 360° TRUE NORTH.

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)	HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
4200			6600		
4300			6700		
4400			6800		
4500	195	26.0	6900		
4600			7000	190	30.0
4700			7100		
4800			7200		
4900			7300		
5000	190	27.0	7400		
5100			7500	195	36.0
5200			7600		
5300			7700		
5400			7800		
5500	195	17.0	7900		
5600			8000	195	37.0
5700			8100		
5800			8200		
5900			8300		
6000	200	27.0	8400		
6100			8500		
6200			8600		
6300			8700		
6400			8800		
6500	200	29.0	8900		

TABLE V. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED 360° TRUE NORTH.

STATION ALTITUDE 4540.00 FEET MSL
 4 MAY 70 0345 PRS MDT
 ASCENSION NC. 224

SIGNIFICANT LEVEL DATA
 1260040224
 STALLION

WSTM SJTF COORDINATES
 402783.00 FEET F
 701403.00 FEET N

TABLE VI

PRESSURE MILLIBARS	GELMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
851.5	4940.0	10.5	-2.2	41.0
842.0	5250.6	17.7	-3.7	23.0
831.0	6645.8	16.0	-4.6	24.0
799.0	8137.9	12.6	-6.9	25.0
725.0	9395.6	10.6	-8.1	26.0
645.0	12541.1	1.5	-13.8	31.0

UPPER AIR DATA
 1260040274
 STALLICN

STATION ALTITUDE 4540.00 FEET MSL
 4 MAY 70 0345 PRS MDT
 ASCENSION NO. 224

MSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE VII

GEOGRAPHIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNCTS	KNCTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
4540.0	851.5	10.5	-2.2	41.0	1043.5	656.5	0.	0.	1.000257	
5000.0	849.7	11.5	-2.1	37.5	1036.2	658.2	0.5	355.6	1.000255	
5500.0	834.5	17.4	-3.8	23.2	998.7	664.4	4.8	318.5	1.000243	
6000.0	819.7	16.8	-4.2	23.5	983.0	663.7	9.1	281.4	1.000239	
6500.0	805.2	16.2	-4.5	23.9	967.6	663.0	13.3	244.4	1.000235	
7000.0	790.8	15.2	-5.1	24.2	953.7	661.9	17.6	207.3	1.000232	
7500.0	776.7	14.1	-5.9	24.6	940.4	660.5	19.7	193.9	1.000228	
8000.0	762.6	12.5	-6.7	24.9	927.3	659.2	20.4	196.6	1.000224	
8500.0	749.1	12.0	-7.3	25.3	913.5	658.1	21.6	199.3	1.000220	
9000.0	735.5	11.2	-7.7	25.7	899.6	657.2	23.9	201.6	1.000216	
9500.0	722.2	10.3	-8.3	26.2	886.2	656.1	24.8	204.0	1.000213	
10000.0	708.5	8.9	-9.2	27.0	874.4	654.4	22.8	206.6	1.000209	
10500.0	695.8	7.4	-10.1	27.8	862.8	652.7			1.000206	
11000.0	682.0	6.0	-11.0	28.6	851.4	651.0			1.000203	
11500.0	670.5	4.5	-11.9	29.3	840.1	649.3			1.000199	
12000.0	658.1	3.1	-12.8	30.1	829.0	647.6			1.000196	
12500.0	646.0	1.6	-13.8	30.9	818.1	645.8			1.000193	

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0345 HRS MDT
 ASHFASICA NC. 224

MANDATORY LEVELS
 1260040224
 SYALLICN

WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE VIII

PRESSURE GEOPCENTIAL MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
			DIRECTION DEGREES(TN)	SPEED KNOTS
550.0	11.6	38.	356.4	0.4
800.0	15.9	24.	231.0	14.9
750.0	12.1	25.	199.1	21.4
700.0	7.9	28.		
650.0	2.1	31.		

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASCENSION NC. 225

SIGNIFICANT LEVEL DATA
 1260040225
 STALLION

WGM SITE COORDINATES
 402702.00 FEET E
 701402.00 FEET N

TABLE IX

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
691.3	4940.0	5.0	40.0
835.0	5340.6	16.1	28.0
766.0	7867.5	13.6	25.0
720.0	9191.2	10.7	28.0
575.0	15345.6	-5.8	47.0
546.0	16848.8	-8.8	23.0
521.0	16989.1	-6.9	37.0
521.0	17319.6	-6.7	16.0
461.0	21054.6	-17.6	30.0
418.0	23471.7	-24.8	46.0
408.0	24050.4	-25.6	49.0
392.0	24941.8	-26.8	19.0
376.0	25864.4	-27.5	18.0
332.0	28885.8	-35.6	36.0
312.0	30257.3	-39.4	51.0
292.0	31776.9	-43.0	49.0
228.0	36202.5	-54.5	
202.0	35457.8	-62.4	
188.0	41054.8	-63.5	
170.0	42051.1	-63.5	
166.0	42571.9	-64.4	
141.0	48861.0	-64.4	
134.0	47882.8	-66.3	
126.0	45122.5	-62.5	
102.0	52405.2	-63.7	
86.0	56852.5	-64.4	
82.0	57573.0	-62.0	
71.0	60735.0	-64.8	
68.0	61616.4	-61.1	
62.0	62510.5	-61.1	

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASCENSION NC. 225

SIGNIFICANT LEVEL DATA
 1260040225
 STALLION

WSTM SITE COORDINATES
 402763.00 FEET F
 701403.00 FEET N

TABLE IX (Cont)

PRESSURE GEOMETRIC ALTITUDE		TEMPERATURE		REL. HUM.
MILLIBARS	MSL FEET	AIR	DEWPOINT	PERCENT
		DEGREES	CENTIGRADE	
48.0	66790.2	-58.6		
39.0	73131.0	-55.6		
37.0	74236.4	-56.1		
29.0	79419.0	-50.9		
26.0	81766.7	-47.7		
21.0	86501.3	-42.9		
20.0	87588.5	-43.6		
18.0	89951.8	-39.9		
17.0	91255.0	-36.1		
16.0	92642.4	-36.2		
14.0	95708.3	-34.6		
12.5	98306.8	-35.0		
9.2	105287.6	-37.9		

UPPER AIR DATA
 1260040225
 STALLION

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 MRS MDT
 ASCENSION NO. 225

WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE X

GEOGRAPHIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4540.0	851.3	9.6	-3.5	40.0	1045.1	654.7	350.0	6.0	1.000256
5000.0	849.4	10.1	-3.5	38.2	1042.8	656.0	347.1	6.3XX	1.000255
5500.0	834.2	15.5	-2.6	27.8	1009.1	662.8	322.5	8.7XX	1.000246
6000.0	819.3	15.4	-3.4	27.2	987.0	662.2	297.9	11.0XX	1.000242
6500.0	804.7	15.0	-4.1	26.6	971.1	661.6	273.3	13.4XX	1.000237
7000.0	790.3	14.5	-4.8	26.0	955.5	661.0	248.8	15.7XX	1.000232
7500.0	776.2	14.0	-5.5	25.4	940.1	660.4	224.2	18.1XX	1.000228
8000.0	762.3	13.3	-6.2	25.3	925.4	659.7	199.6	20.4XX	1.000224
8500.0	748.6	12.2	-6.5	26.4	912.3	658.4	197.6	22.0	1.000221
9000.0	735.1	11.1	-6.5	27.6	899.3	657.1	199.4	23.4	1.000217
9500.0	721.6	9.9	-7.4	25.0	886.6	655.7	199.7	24.2	1.000214
10000.0	708.1	8.5	-7.9	30.5	874.3	654.1	199.7	24.2	1.000211
10500.0	694.5	7.2	-8.4	32.0	862.1	652.5	199.3	22.7	1.000208
11000.0	681.5	5.9	-9.0	33.6	850.1	650.9	197.7	21.8	1.000205
11500.0	669.2	4.5	-9.6	35.1	838.4	649.4	195.7	21.1	1.000201
12000.0	656.7	3.2	-10.3	36.7	826.8	647.8	193.7	21.0	1.000198
12500.0	644.5	1.8	-10.9	38.2	815.3	646.2	192.0	21.1	1.000195
13000.0	632.5	0.5	-11.7	35.8	804.1	644.6	190.9	21.6	1.000192
13500.0	620.7	-0.9	-12.4	41.3	793.0	643.0	192.2	21.8	1.000189
14000.0	609.1	-2.2	-13.2	42.8	782.1	641.4	195.1	22.0	1.000186
14500.0	597.7	-3.5	-14.0	44.4	771.4	639.8	200.3	23.2	1.000183
15000.0	586.6	-4.9	-14.8	45.5	760.9	638.2	206.2	24.8	1.000180
15500.0	575.3	-6.1	-16.3	44.5	750.0	636.7	213.4	26.9	1.000176
16000.0	564.4	-7.1	-15.5	36.6	738.5	635.4	218.9	28.7	1.000171
16500.0	553.5	-8.1	-23.3	28.6	727.1	634.1	223.3	30.2	1.000167
17000.0	542.8	-8.9	-21.2	26.3	715.1	633.2	226.6	29.1	1.000165
17500.0	532.2	-9.1	-30.0	16.7	702.0	632.8	229.6	27.6	1.000155
18000.0	521.6	-10.3	-25.5	18.5	691.2	631.4	232.5	25.8	1.000157
18500.0	511.3	-11.5	-25.9	20.4	680.6	630.0	235.2	24.2	1.000154
19000.0	501.2	-12.7	-25.9	22.2	670.1	628.6	237.6	23.2	1.000152

XX WIND DATA MAY BE INVALID DUE TO MISSING FAN AZIMUTH AND ELEVATION ANGLES.

UPPER AIR DATA
 126040225
 STALLION

WSTM SJTE CCORDINATES
 402783.00 FEET E
 701403.00 FEET N

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASCENSION NC. 225

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCAND KNOTS	WIND DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
15500.0	491.2	-12.6	24.1	659.9	627.1	240.2	22.8	1.000150
20000.0	481.6	-15.0	25.5	649.8	625.7	243.1	23.0	1.000148
20500.0	472.1	-16.2	27.6	639.9	624.3	245.1	23.1	1.000145
21000.0	462.7	-17.4	29.6	630.1	622.8	246.7	23.2	1.000143
21500.0	453.4	-18.6	32.7	620.9	621.1	247.0	23.3	1.000141
22000.0	444.1	-20.2	36.1	611.9	619.2	246.8	23.9	1.000139
22500.0	435.1	-21.5	39.5	603.0	617.4	245.1	25.9	1.000137
23000.0	426.2	-23.4	42.6	594.3	615.5	242.8	28.9	1.000135
23500.0	417.5	-24.8	46.1	585.6	613.7	240.2	32.4	1.000133
24000.0	408.5	-25.5	48.7	575.1	612.8	241.1	35.1	1.000130
24500.0	400.4	-26.2	52.9	564.7	612.0	242.2	36.5	1.000127
25000.0	392.0	-26.8	58.9	554.5	611.1	243.7	35.9	1.000124
25500.0	383.5	-27.2	64.4	543.8	610.7	245.1	35.8	1.000122
26000.0	375.6	-27.5	70.6	533.7	609.9	246.4	35.5	1.000120
26500.0	367.8	-29.2	77.8	525.3	608.2	246.9	35.2	1.000118
27000.0	360.0	-30.5	84.4	517.0	606.5	247.2	34.6	1.000116
27500.0	352.4	-31.5	91.4	508.8	604.8	246.9	35.8	1.000114
28000.0	344.9	-32.2	98.7	500.8	603.2	246.7	36.8	1.000112
28500.0	337.5	-34.6	106.4	492.9	601.5	248.1	37.0	1.000110
29000.0	330.2	-35.5	114.4	485.1	599.8	249.4	37.4	1.000109
29500.0	322.1	-37.3	122.6	477.2	598.1	250.3	38.2	1.000107
30000.0	316.1	-38.6	131.1	469.5	596.4	250.9	39.0	1.000105
30500.0	309.2	-39.5	139.8	461.8	594.7	251.0	39.8	1.000103
31000.0	302.3	-41.1	148.8	453.9	593.2	251.1	40.4	1.000102
31500.0	295.7	-42.3	158.1	446.2	591.6	251.3	40.8	1.000100
32000.0	289.0	-43.6	167.7	438.6	590.0	251.3	41.6	1.000098
32500.0	282.4	-44.9	177.6	431.0	588.3	251.3	42.6	1.000096
33000.0	276.0	-46.2	187.7	423.6	586.6	251.4	44.1	1.000095
33500.0	269.7	-47.5	198.0	416.3	585.0	251.4	45.8	1.000093
34000.0	263.5	-48.8	208.6	409.2	583.3	251.5	47.4	1.000091

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

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 HRS MDT
 ASCENSION NO. 222

UPPER AIR DATA
 1260040225
 STALLION

WSTM SITE COORDINATES
 403783.00 FEET E
 701402.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
34500.0	257.5	-50.1	16.5**	402.2	581.6	251.4	49.4	1.000090
35000.0	251.6	-51.4	13.3**	395.3	579.9	250.5	52.3	1.000088
35500.0	245.9	-52.7	7.8**	388.5	578.2	250.0	54.6	1.000087
36000.0	240.2	-54.0	2.3**	381.9	576.5	250.2	56.0	1.000085
36500.0	234.6	-55.2		375.1	574.8	250.7	57.7	1.000084
37000.0	229.0	-56.4		368.2	573.2	251.5	59.6	1.000082
37500.0	223.6	-57.6		361.4	571.7	252.7	60.5	1.000080
38000.0	218.2	-58.8		354.7	570.1	254.3	60.4	1.000079
38500.0	213.0	-60.0		348.2	568.5	256.1	60.0	1.000078
39000.0	207.9	-61.2		341.8	566.9	257.9	59.5	1.000076
39500.0	203.0	-62.4		335.6	565.3	259.5	58.8	1.000075
40000.0	198.0	-63.6		327.9	564.8	260.9	58.1	1.000073
40500.0	193.2	-63.1		320.5	564.3	261.2	57.9	1.000071
41000.0	188.5	-63.5		313.2	563.8	259.7	58.6	1.000070
41500.0	183.5	-63.5		305.6	563.8	258.3	59.2	1.000068
42000.0	179.4	-63.5		298.2	563.8	257.3	59.0	1.000066
42500.0	175.0	-63.5		290.9	563.8	256.2	58.5	1.000065
43000.0	170.8	-63.5		283.8	563.8	254.7	59.0	1.000063
43500.0	166.6	-64.3		277.9	562.8	253.1	58.8	1.000062
44000.0	162.5	-64.4		271.2	562.6	252.3	56.2	1.000060
44500.0	158.5	-64.4		264.6	562.6	251.3	53.8	1.000059
45000.0	154.6	-64.4		258.1	562.6	247.9	53.7	1.000057
45500.0	150.5	-64.4		251.8	562.6	244.6	53.7	1.000056
46000.0	147.2	-64.4		245.6	562.6	242.3	54.2	1.000055
46500.0	143.5	-64.4		239.6	562.6	239.9	54.7	1.000053
47000.0	140.0	-64.7		234.0	562.2	240.3	53.4	1.000052
47500.0	136.6	-65.6		229.3	561.0	241.1	56.2	1.000051
48000.0	132.2	-66.0		224.0	560.5	242.6	56.0	1.000050
48500.0	130.0	-64.6		217.1	562.3	245.0	54.5	1.000048
49000.0	126.8	-63.2		210.4	564.1	247.1	52.9	1.000047

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

UPPER AIF DATA
 126CC4C225
 STALLION
 WSTM SITE COORDINATES
 402182.00 FEET E
 701402.00 FEET N

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0645 FRS MDT
 ASCENSTION NC. 225

TABLE X (Cont)

GEO-METRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4950.0	123.7	-62.0		205.0	564.5	248.5	50.9	1.000046
5000.0	120.7	-62.1		200.1	564.4	249.8	49.1	1.000045
5050.0	117.7	-62.2		195.3	564.3	250.2	47.9	1.000042
5100.0	114.9	-62.3		190.6	564.1	250.7	46.8	1.000042
5150.0	112.1	-62.3		186.1	564.0	251.1	45.7	1.000041
5200.0	109.3	-62.4		181.6	563.9	251.6	44.6	1.000040
5250.0	106.7	-62.5		177.3	563.8	252.7	43.1	1.000039
5300.0	104.1	-62.6		173.0	563.6	253.9	41.5	1.000039
5350.0	101.5	-62.7		168.9	563.5	254.2	39.3	1.000038
5400.0	99.0	-62.8		164.8	563.4	253.8	36.6	1.000037
5450.0	96.6	-62.9		160.9	563.2	253.1	34.0	1.000036
5500.0	94.3	-64.0		157.0	563.1	251.4	31.7	1.000035
5550.0	92.0	-64.1		153.3	563.0	249.7	29.4	1.000034
5600.0	89.7	-64.2		149.6	562.8	249.9	27.2	1.000033
5650.0	87.5	-64.3		146.0	562.7	250.6	25.0	1.000033
5700.0	85.4	-62.9		142.2	563.2	250.6	22.5	1.000032
5750.0	83.3	-62.2		137.6	565.5	248.9	19.6	1.000031
5800.0	81.3	-62.4		134.3	565.3	247.1	16.7	1.000030
5850.0	79.3	-62.8		131.3	564.7	245.4	16.5	1.000029
5900.0	77.4	-62.3		128.4	564.1	243.8	16.7	1.000029
5950.0	75.5	-62.7		125.6	563.5	241.0	16.4	1.000028
6000.0	73.6	-64.1		122.8	562.9	237.3	15.5	1.000027
6050.0	71.8	-64.6		120.0	562.3	234.2	14.5	1.000027
6100.0	70.1	-62.7		116.6	563.5	235.3	12.6	1.000026
6150.0	68.4	-61.6		112.6	566.4	236.4	10.7	1.000025
6200.0	66.7	-61.1		109.7	567.0	258.0	7.8	1.000024
6250.0	65.1	-61.1		107.0	567.0	284.7	4.6	1.000024
6300.0	63.6	-61.1		104.4	567.0	309.4	2.9	1.000023
6350.0	62.0	-61.1		101.9	567.0	331.3	3.3	1.000023
6400.0	60.5	-60.9		99.4	567.3	353.3	3.7	1.000022

UPPER AIR DATA
 1260040225
 STALLION

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 MRS RDT
 ASCENSION NO. 225

WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE PSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TA)	WIND (ATA) SPEED KNOTS	INDEX OF REFRACTION
64500.0	59.1	-60.6		96.9	567.6	338.2	5.2	1.000022
65000.0	57.7	-60.4		94.5	568.0	323.0	6.6	1.000021
65500.0	56.3	-60.2		92.1	568.3	312.7	6.9	1.000021
66000.0	55.0	-59.9		89.8	568.6	306.1	6.2	1.000020
66500.0	53.6	-59.7		87.5	568.9	299.4	5.5	1.000019
67000.0	52.4	-59.4		85.4	569.2	291.5	4.9	1.000019
67500.0	51.1	-59.2		83.2	569.5	283.6	4.3	1.000019
68000.0	49.9	-59.0		81.1	569.8	269.9	3.7	1.000018
68500.0	48.7	-58.7		79.1	570.2	248.2	3.2	1.000018
69000.0	47.5	-58.5		77.1	570.5	226.6	2.6	1.000017
69500.0	46.4	-58.1		75.2	571.0	212.6	2.3	1.000017
70000.0	45.3	-57.8		73.3	571.5	216.7	2.8	1.000016
70500.0	44.2	-57.4		71.4	571.9	220.8	3.2	1.000016
71000.0	43.2	-57.1		69.6	572.4	224.9	3.7	1.000015
71500.0	42.2	-56.7		67.9	572.8	222.8	4.2	1.000015
72000.0	41.2	-56.4		66.2	573.3	220.5	4.7	1.000015
72500.0	40.2	-56.0		64.5	573.7	218.3	5.2	1.000014
73000.0	39.2	-55.7		62.9	574.2	222.5	5.3	1.000014
73500.0	38.3	-55.8		61.4	574.1	230.2	5.2	1.000014
74000.0	37.4	-56.0		60.0	573.8	238.0	5.1	1.000013
74500.0	36.5	-55.8		58.6	574.0	260.3	4.8	1.000013
75000.0	35.7	-55.3		57.1	574.7	316.6	4.2	1.000013
75500.0	34.9	-54.8		55.6	575.3	12.8	3.5	1.000012
76000.0	34.1	-54.3		54.2	576.0	63.2	3.3	1.000012
76500.0	33.3	-53.8		52.8	576.6	61.4	7.0	1.000012
77000.0	32.5	-53.3		51.5	577.3	59.6	10.6	1.000011
77500.0	31.7	-52.8		50.2	578.0	59.2	14.2	1.000011
78000.0	31.0	-52.3		48.9	578.6	63.2	17.9	1.000011
78500.0	30.3	-51.8		47.7	579.3	67.3	21.6	1.000011
79000.0	29.6	-51.3		46.5	579.9	69.7	23.0	1.000010

UPPER AIF DATA
 1260C40225
 STALLION

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70
 ASCENSION NC. 225

WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
75500.0	28.5	-50.8		45.3	580.6	70.8	22.6	1.000010
80000.0	28.2	-50.1		44.1	581.5	71.9	22.3	1.000010
85000.0	27.6	-49.4		43.0	582.4	72.7	21.0	1.000010
90000.0	27.0	-48.8		41.9	583.3	73.3	19.6	1.000005
95000.0	26.3	-48.1		40.8	584.1	73.8	18.1	1.000005
100000.0	25.7	-47.5		39.8	584.9	73.5	16.2	1.000005
105000.0	25.2	-47.0		38.8	585.6	73.2	14.4	1.000005
110000.0	24.6	-46.5		37.8	586.3	72.8	13.3	1.000008
115000.0	24.1	-46.0		36.9	586.9	72.4	13.9	1.000008
120000.0	23.5	-45.4		36.0	587.6	71.9	14.4	1.000008
125000.0	23.0	-44.9		35.1	588.2	70.0	17.5	1.000008
130000.0	22.5	-44.4		34.2	588.9	66.9	22.5	1.000008
135000.0	22.0	-43.9		33.4	589.5	63.8	27.6	1.000007
140000.0	21.5	-43.4		32.6	590.2	66.5	25.0	1.000007
145000.0	21.0	-42.9		31.8	590.8	71.4	19.7	1.000007
150000.0	20.5	-42.2		31.1	590.4	76.3	14.3	1.000007
155000.0	20.1	-41.5		30.5	590.0	75.7	11.6	1.000007
160000.0	19.6	-41.0		29.7	590.8	73.8	9.6	1.000007
165000.0	19.2	-40.2		29.0	591.8	71.9	7.5	1.000006
170000.0	18.8	-41.4		28.2	592.8	109.7	6.3	1.000006
175000.0	18.4	-40.6		27.5	593.8	155.7	5.2	1.000006
180000.0	18.0	-39.8		26.8	594.9	201.6	4.1	1.000006
185000.0	17.6	-38.3		26.1	596.7	165.9	6.8	1.000006
190000.0	17.2	-36.8		25.3	598.6	113.2	10.3	1.000006
195000.0	16.8	-36.5		24.8	599.0	60.5	13.8	1.000006
200000.0	16.5	-37.2		24.3	598.1	52.7	33.9	1.000005
205000.0	16.1	-38.0		23.9	597.1	56.1	58.1	1.000005
210000.0	15.6	-37.8		23.3	597.4	59.5	82.3	1.000005
215000.0	15.4	-37.2		22.8	598.1	57.8	69.0	1.000005
220000.0	15.1	-36.6		22.2	598.9	54.5	43.2	1.000005

UPPER AIR DATA
 1260040225
 STALLION

WSTM SITE COORDINATES
 40°28'2.00 FEET E
 701402.00 FEET N

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASCENSION NC. 225

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR CENTIGRADES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
54500.0	14.8	-36.0		21.7	599.6	51.1	17.4	1.000005
55000.0	14.4	-35.4		21.2	600.3	50.0	8.5	1.000005
55500.0	14.1	-34.8		20.7	601.1	50.0	6.5	1.000005
56000.0	13.8	-34.1		20.2	600.8	49.9	5.2	1.000005
56500.0	13.5	-33.5		19.9	599.7	15.0	18.5	1.000004
57000.0	13.2	-32.8		19.5	598.6	320.7	40.0	1.000004
57500.0	12.9	-32.6		19.2	597.6	266.3	61.5	1.000004
58000.0	12.7	-32.5		18.8	596.5	263.8	58.6	1.000004
58500.0	12.4	-32.0		18.4	595.9	257.2	38.6	1.000004
59000.0	12.1	-31.5		18.0	596.0	330.6	16.7	1.000004
59500.0	11.9	-31.8		17.6	596.1	346.5	10.1	1.000004
60000.0	11.6	-31.7		17.2	596.2	348.1	10.9	1.000004
60500.0	11.4	-31.7		16.9	596.3	349.7	11.7	1.000004
61000.0	11.1	-31.6		16.5	596.4	352.2	12.4	1.000004
61500.0	10.9	-31.5		16.1	596.5	355.6	13.1	1.000004
62000.0	10.6	-31.4		15.8	596.6	358.9	13.8	1.000004
62500.0	10.4	-31.3		15.4	596.7			1.000003
63000.0	10.2	-31.3		15.1	596.8			1.000003
63500.0	10.0	-31.2		14.8	596.9			1.000003
64000.0	9.7	-31.1		14.4	597.0			1.000003
64500.0	9.5	-31.0		14.1	597.1			1.000003
65000.0	9.3	-30.9		13.8	597.2			1.000003

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASCPNSICA NC. 225

MANCATORY LEVELS
 126CC40225
 STALLICA

WSTM SITE COORDINATES
 40378E.00 FEET E
 70140E.00 FEET N

TABLE X (Cont)

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	4560.	5.7	-3.6	39.	348.0	6.2XX	
800.0	6662.	14.8	-4.3	26.	265.3	14.1XX	
750.0	8445.	12.3	-6.5	26.	197.4	21.9	
700.0	10327.	7.7	-8.2	31.	199.5	23.2	
650.0	12312.	2.4	-10.6	38.	192.4	21.0	
600.0	14412.	-3.3	-13.8	44.	199.5	23.0	
550.0	16648.	-8.4	-24.6	26.	224.4	30.0	
500.0	19058.	-12.8	-30.0	22.	237.9	23.0	
450.0	21663.	-19.4	-31.4	34.	247.1	23.4	
400.0	24491.	-26.2	-37.8	33.	242.3	36.5	
350.0	27629.	-32.3	-44.6	29.	246.7	36.1	
300.0	31127.	-41.5	-48.1	50.	251.2	40.6	
250.0	35056.	-51.7	-68.4	12.**	250.2	53.2	
200.0	39719.	-62.6			260.3	58.4	
175.0	42412.	-63.5			256.3	58.9	
150.0	45906.	-64.4			244.1	53.8	
125.0	49161.	-62.9			247.9	51.8	
100.0	52660.	-63.8			253.9	37.7	
80.0	58152.	-62.7			246.1	16.4	
70.0	60639.	-63.6			235.3	12.5	
60.0	63577.	-60.6			348.1	4.2	
50.0	67714.	-59.0			272.7	3.8	
40.0	72337.	-56.0			217.9	5.3	
30.0	78385.	-51.6			68.7	22.9	
25.0	82308.	-46.8			73.1	13.9	
20.0	87211.	-43.6			75.4	11.3	
15.0	92662.	-36.5			53.8	37.8	
10.0	102662.	-38.2					

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

XX WIND DATA MAY BE INVALID DUE TO MISSING FAW AZIMUTH AND ELEVATION ANGLES.

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)

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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 Office White Sands Missile Range, New Mexico.			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
13. ABSTRACT Meteorological data gathered for the launching of AF03702 Honest John, Missile Number 620, Round Number 602 AML, are presented in tabular form.			

DD FORM 1473

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14.

KEY WORDS

LINE A
LINE B
LINE C

ROLE BY ROLE BY ROLE BY

1. Ballistics
2. Meteorology
3. Wind

UNCLASSIFIED

Security Classification