

U.S. DEPT. COMM./NOAA/O&O - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 970802H	FM: MMPR	TO: MMPR
FLT NO: 97-051	BLK IN: 0212Z	ATA: 0204Z
ETD: 1630Z	BLK OUT: 1631Z	RTD: 1640Z
ETE: 0200Z	BLK TIME: 9:41 9.7	FLT TIME: 9:24 9.4
SPONSOR ORG: HRD	PROGRAM: VINE	PURPOSE: HARR. GUILLEMO

000 PERSONNEL

AC KENNEDY, P ✓	SYS ENG McMILLAN, S
CP KENDU, P / TAGGART, B ✓	DATA SYS CARPENTER, D ✓
NAV RATHBUN, D ✓	RADAR BARR, J ✓
FE BAST, G ✓	BT/ODW
RADIO ROGERS, M ✓	CLD PHYS
FD CZYZYK, S ✓	DOPPLER MCFADDEN, J ✓

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
31 CAMACHE, J ✓	PI	HRP
HOUSTON, S ✓	SLIPARTIST	
BLACK, M ✓		
DORST, N ✓		
LEIGHTON, P ✓		
47		10 penetrations

PROPOSED	ACTUAL	MISSION/REMARKS (RECCO, FIXES, STORM, PCNET, NHOP #)
D-11-23	(11)	To WAO.

REMARKS (RECCO, FIXES, STORM, PLANET, NHOP)			
DWI & 2 STILL TO WARREN			
BALANCE 14 3 1704-08Z		9 1854Z	957 MB 110 KTS E 13° 16' N 107° 12' W
9 2117Z 952 MB 100 KTS 13 20 N 107 34 W	9 2154Z 951 MB 100 KTS 13 23 N 107 36 W	9 2205Z 949 MB 13 19.3 107 43.2	9 1933Z 957 MB 125 KTS N 13 20 N 107 15 W
9 2257Z 949 MB 13 24.2 107 47.9	9 2332Z 947 MB 13 24.5 107 52.8	9 0003Z 944 MB 13 26 107 57	9 2001 956 MB 98 KTS 13 18 N 107 22 W 954 MB 110 KTS 13 20 107 27

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID: 970802H

TIME OFF: 1640Z

TIME ON: 021

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1011.7	29.96		29.88

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

ODW

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

10 Penetrations

HURRICANE GUILLERMO

Flight #1 H970802

Sensor or system

Number or Name

INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2973.CON

Notes:

Downward spikes in radar altimeter are a result of overflying land (1645:31-1653:00 and 0151:31-0155:30).

Radar altimeter (RA-159) had a spike at takeoff (1640:15-1640:30) and was replaced with RA-232. RA-159 was set to zero at landing due to spike (0204:03-0208:00).

Dewpoint #1 (DW1) had spike at 1702:01-1707:00 due to balancing. The spike was removed and patched. DW1 was replaced by DW2 from 1645:20-1726:30 due to DW1 problems when below zero. DW1 was replaced by DW3 from 0022:01-0152:50 due to DW1 problems below zero. DW1 was patched 0021:01-0022:05 due to spike.

Static pressure (PSF) had five (7) spikes removed and patched 1915:01-1920:00, three (3) spikes removed and patched 1924:31-1926:00, and one (1) spike removed and patched 2036:31-2037:00. Static pressure (PSF) was replaced by PSW+3.0 from 2027:01-2031:00 and had (8) spikes removed and patched.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1011.7	1009.4
Corrected tower pressure	1014.6	1011.9

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Flight Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

970802H

[illegible]

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TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
HURR. GUILLERMO
YYMMDDL FLT I.D.
970802H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
163601
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
020800
HHMMSS TAKE OFF TIME
164001
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
2
* -----LOGICAL UNIT OF INPUT DATA (I1) 5, 8 OR 9 FOR TAPE DRIVE
9
* -----LOGICAL UNIT OF OUTPUT TAPE DRIVE (I1) [FOR STANDARD TAPE ONLY]
9
* -----LOGICAL UNIT OF PRINTER (I1)
6
* -----DATE OF PROGRAM (MMDDY)
06094
* -----STATIC PRESSURE PROBE (I1)
* 1 = PSW (WINGTIP)
* 2 = PSF (CO-PILOT/FUSELAGE)
* 3 = FUTURE USE
2
* -----DYNAMIC PRESSURE PROBE (I1)
* 0 = PQW(WINGTIP)
* 1 = PQF1 (FUSELAGE 1281)
* 2 = PQF2 (FUSELAGE 1221)
* 3 =FUTURE US
1
* -----INE SELECTION (I1)
* 1 = INE 1
* 2 = INE 2
1
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
1
* ----- TOTAL TEMPERATURE PROBE (I1) [1 OR 2]
1
* ----- DEWPONT TEMPERATURE PROBE (I1) [1 OR 2]
1
* -----ALTIMETER OPTION (I1) - FOR VERTICAL WIND COMPUTATION
* 0 = PRESSURE ALTITUDE (OVER LAND)
* 1 = RADAR ALTITUDE APN-159 (OVER WATER)
* 2 = RADAR ALTITUDE APN-232 (OVER WATER)
1
* -----PRINTOUT RATE SECONDS (I2)
10
* -----WINDSPEED/DIRECTION RUNNING AVERAGE TIME, SECONDS (I2)
10 ! FOR STANDARD TAPE OUTPUT ONLY
* -----TIME OPTION (I1)
* 1 = MICRO 29
* 2 = TIME BASED GENERATOR #1
* 3 = TIME BASED GENEATOR #2
1
* -----NAME OF CONSTANTS FILE EX CO3863.CON
CO2973.CON
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970802H

RENAV

164000 , 0.8, 0.5	15	53.1	-105	25.5
174000 , 0.8, 0.5	13	21.8	-107	8.6
185400, 0.8, 0.5	13	20.5	-107	11.3
193300, 1.3, 0.3	13	20.1	-107	23.5
200100, 1.5, 0.4	13	19.9	-107	26.5
204200, 1.9, 0.6	13	20.1	-107	33.3
211700, 2.4, 0.3	13	25.5	-107	35.8
215400, 2.8, 0.8	13	22.1	-107	41.6
222500, 3.3, 0.2	13	23.2	-107	45.6
225700, 3.6, 0.5	13	23.6	-107	53.4
233200, 4.1, 0.4	13	28.1	-107	58.6
000300, 4.5, 0.0	14	11.8	-107	12.6
003300, 4.9, 0.4	16	53.7	-106	29.7
010800, 5.3, -0.1	20	40.9	-105	14.8

DW1 REPLACED BY DW3 from ✓
0022:01 - 0152:50 DUE TO
DW1 BEING TOO WARM
PATCHED DUE TO SPIKE
0021:01 - 0022:05

DW1 REPLACED BY DW2 FROM
1645:20 - 1726:30 ✓
DW1 BEING TOO WARM

~~PSF 2~~

RA-159 SPIKE AT TAKEOFF 1640:15 - 1640:30 REPLACE w/232 X
RA-159 ~~DIPS~~ DIPS ARE A RESULT OF OVERFLYING LAND 1645:31 - 1653:00 X

TTZ DROPOUT 0030:31 - 0036:00
RA-159 DIPS ARE A RESULT OF OVERFLYING LAND 0151:31 - 0155:30 X
RA-159 SET TO ZERO AT LANDING DUE TO SPIKE 0204:03 - 0212:00 X

~~DW1 BALANCED, SPIKE REMOVED + PATCHED 1702:15 - 1704:50 REPLACED WITH DW#2~~

BPR SPIKE + PROBLEM 0024:00 - 0025:30

BPR SPIKE + PROBLEM 0110:00 - 0115:00

PSF SPIKES (7) 1915:01 - 1920:00 X

DAP SPIKES (2) 2027:06 - 2027:15, 2027:26 - 2027:35

DAP SPIKES (2) 2027:06 - 2027:15, 2027:26 - 2027:35

~~RA-159~~ SPIKE 2027:06 - 2027:15

~~PSF SPIKES 1840:01 - 1852:00~~

~~PSF SPIKES 1840:01 - 1852:00~~

PSF SPIKES (3) 1924:31 - 1926:00 X

PSF SPIKES (8) 2027:04 - 2031:00 OR ✓ PSF = PSU + 3.0 X

PSF SPIKES (1) 2036:31 - 2037:00 X

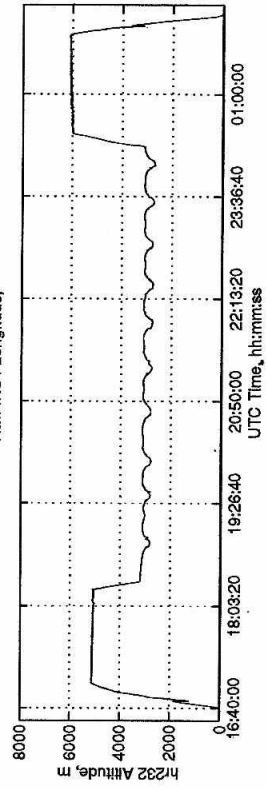
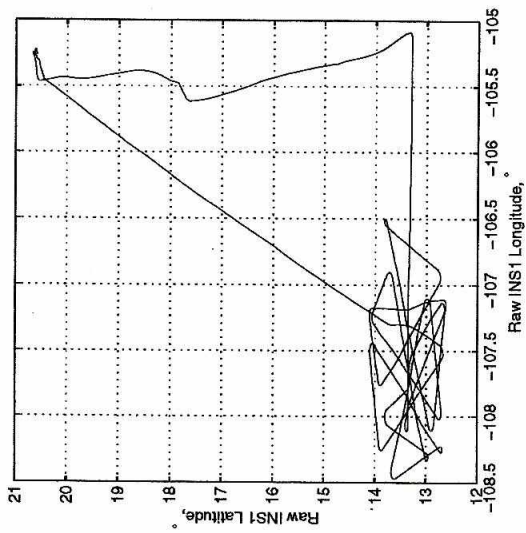
~~DW1~~ 2027:00 - 1702:01 - 1707:00

~~DW1~~ 1702:01 - 1707:00 REPLACED BY ~~DW2~~ 1702:01 - 1707:00 X

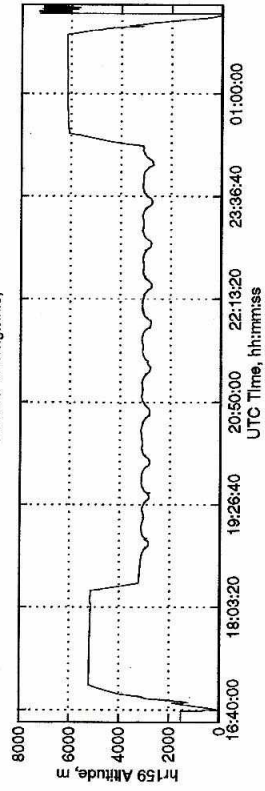
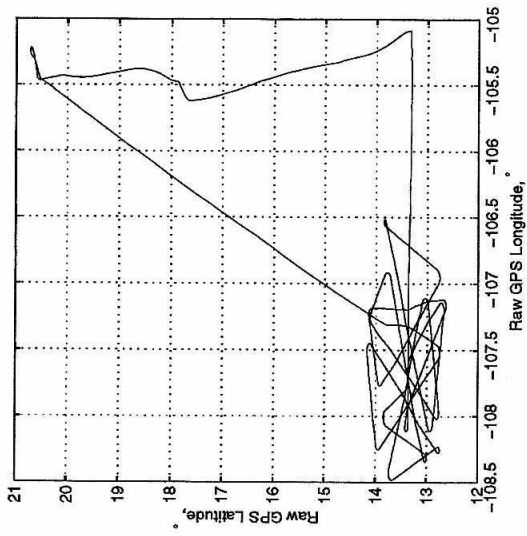
BALANCED SPIKE REMOVED + PATCHED

170201 1703
170530 - 1706:30

N42RF --- HUR97 --- 02 August 1997 UTC



N42RF --- HUR97 --- 02 August 1997 UTC



DATE <u>8/2/97</u>		SCHEDULED FIX TIME		AIRCRAFT NUMBER <u>N42RF</u>		ARWO	
WX MISSION IDENTIFICATION <u>WXWXP GUILLERMO</u>							OB
(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE							
A	<u>02/ 2117</u> Z		DATE AND TIME OF FIX				
B	<u>13</u> DEG <u>20</u> MIN <u>N</u> S		LATITUDE OF VORTEX FIX				
	<u>107</u> DEG <u>34</u> MIN <u>E</u> <u>W</u>		LONGITUDE OF VORTEX FIX				
C	<u>952</u> MB <u>2730</u> M		MINIMUM HEIGHT AT STANDARD LEVEL				
D	<u>NA</u> KT		ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED				
E	<u>NA</u> DEG NM		BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND				
F	<u>230</u> DEG <u>100</u> KT		MAXIMUM FLIGHT LEVEL WIND NEAR CENTER				
G	<u>150</u> DEG <u>14</u> NM		BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND				
H	<u>EXTRAP 952</u> MB		MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.				
I	<u>C/</u> M		MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE				
J	<u>C/</u> M		MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE				
K	<u>C/</u> C		DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE				
L	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.						
M	EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C -Circular; CO - Concentric; E- Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. E09/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.						
N	DEG MIN N S		CONFIRMATION OF FIX: Coordinates and time				
	DEG MIN E W						
	Z						
O	<u>/</u>		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.				
P	<u>/</u> NM		NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY				
Q	REMARKS MAX FL WIND <u>120</u> KT <u>N</u> QUAD <u>1940Z</u> Z SLP EXTRAP FROM (1500 FT/925 MB/850 MB/ DROPSONDE) <u>700 MB</u> SFC CNTR <u>/</u> NM FROM FL CNTR MAX FL TEMP <u>C</u> NM FROM FL CNTR						

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE

8/2/97

SCHEDULED FIX TIME

AIRCRAFT NUMBER

ARWO

WX MISSION IDENTIFICATION

WXWXP GUILLERMO

08

(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE

A	02/2332	Z	DATE AND TIME OF FIX
	13 DEG 24 MIN (N) S		LATITUDE OF VORTEX FIX
B	107 DEG 53 MIN E (W)		LONGITUDE OF VORTEX FIX
C	700 MB 2683	M	MINIMUM HEIGHT AT STANDARD LEVEL
D	NA	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED
E	NA DEG	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND
F	305 DEG 100	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	290 DEG 8	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	EXTRAP 947	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	11 CI 3073	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE
J	20 CI 3052	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE
K	NA CI	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE
L	CLOSED		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C20		EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.
	13 DEG 24 MIN (N) S		CONFIRMATION OF FIX: Coordinates and time
	107 DEG 53 MIN E (W)		
N	02/2332	Z	
O	12345/7		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; Indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 600 mb; 5 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.
P	2/2	NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY

Q REMARKS

MAX FL WIND 125 KT NE QUAD 2222 Z

SLP EXTRAP FROM 1500 FT 925 MB / 950 MB / DROPSONDE 700 MB

SFC CNTR / NM FROM FL CNTR

MAX FL TEMP C / NM FROM FL CNTR

MAX SFC WIND OBSERVED 100 KTS 6 NM NE OF CTR

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DATE

8/2/97

SCHEDULED FIX TIME

AIRCRAFT NUMBER

N42RF

ARWO

WX MISSION IDENTIFICATION

WRWXP GUILLERMO

OB

(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE

A	02/1854	Z	DATE AND TIME OF FIX
B	13 DEG/6 MIN (N) S		LATITUDE OF VORTEX FIX
B	107 DEG/2 MIN E (W)		LONGITUDE OF VORTEX FIX
C	700 MB 2770	M	MINIMUM HEIGHT AT STANDARD LEVEL
D	NA	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED
E	NA DEG	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND
F	175 DEG 110	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	090 DEG 20	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	957 EXTRAP 957	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	11 CI 3080	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE
J	17 CI 3060	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE
K	NA CI	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE
L	OPEN CLOSED		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C30		EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/6 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.
N	13 DEG/6 MIN (N) S 107 DEG/2 MIN E (W) 02/1854	Z	CONFIRMATION OF FIX: Coordinates and time
O	12345 / 7		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 600 mb; 5 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.
P	5 / 5	NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY
Q	REMARKS		
MAX FL WIND <u>110</u> KT <u>E</u> QUAD <u>1850</u> Z SLP EXTRAP FROM (1500 FT/ 925 MB/ 850 MB/ DROPSONDE) <u>700 MB</u> SFC CNTR _____ / _____ NM FROM FL CNTR MAX FL TEMP _____ C _____ / _____ NM FROM FL CNTR FLY LOW CTR			

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE

8/2/97

SCHEDULED RX TIME

AIRCRAFT NUMBER

N42KF

ARWO

WX MISSION IDENTIFICATION

WXWXP 6VILLERMO

OB

(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE

A	02/ 2001	Z	DATE AND TIME OF FIX
	13 DEG 18 MIN (N) S		LATITUDE OF VORTEX FIX
B	107 DEG 22 MIN E (W)		LONGITUDE OF VORTEX FIX
C	700 MB 2753	M	MINIMUM HEIGHT AT STANDARD LEVEL
D	95	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED
E	020 DEG 35	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND
04F	107 DEG 95	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	325 DEG 10	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	EXTRAP 956	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	C/	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE
J	C/	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE
K	C/	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE
L			EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M			EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 360. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.
	DEG MIN N S		CONFIRMATION OF FIX: Coordinates and time
	DEG MIN E W		
N		Z	
O	/		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.
P	/	NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY
Q	REMARKS		
	MAX FL WIND 120 KT N QUAD 1940 Z		
	SLP EXTRAP FROM (1500 FT/925 MB/850 MB/ DROPSONDE) 700 MB		
	SFC CNTR / NM FROM FL CNTR		
	MAX FL TEMP C / NM FROM FL CNTR		

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE 8/2/97	SCHEDULED RX TIME	AIRCRAFT NUMBER N42RF	ARWO
WX MISSION IDENTIFICATION WXWXP GUILLERMO			OB
(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE			
A	02/2001 Z	DATE AND TIME OF FIX	
	13 DEG 28 MIN 0 N S	LATITUDE OF VORTEX FIX	
B	101 DEG 22 MIN 0 E W	LONGITUDE OF VORTEX FIX	
C	700 MB 2753 M	MINIMUM HEIGHT AT STANDARD LEVEL	
D	95 KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED	
E	020 DEG 35 NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND	
F	020 DEG 95 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER	
G	325 DEG 10 NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND	
H	EXTRAP 956 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.	
I	C/ M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE	
J	C/ M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE	
K	C/ C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE	
L		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.	
M		EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C -Circular; CO - Concentric; E- Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 360. Transmit diameter in nautical miles. <i>Examples:</i> C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye-8 NM, outer eye 14 NM.	
N	DEG MIN N S	CONFIRMATION OF FIX: Coordinates and time	
	DEG MIN E W		
	Z		
O	/	FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 500 mb; 5 - 400 mb; 4 - 300 mb; 3 - 200 mb; 2 - 200 mb; NA - Other.	
P	/ NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY	
Q	REMARKS		
	MAX FL WIND 125 KT N QUAD 1940 Z SLP EXTRAP FROM 1500 FT/ 925 MB/ 850 MB/ DROPSONDE 700 MB SFC CNTR _____ / _____ NM FROM FL CNTR MAX FL TEMP _____ C _____ / _____ NM FROM FL CNTR		

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE 8/2/97		SCHEDULED FIX TIME		AIRCRAFT NUMBER N42RF		ARWO	
WX MISSION IDENTIFICATION WXWP GUILLERMO							08
(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE							
A	02/ 2117	Z	DATE AND TIME OF FIX				
	13 DEG 20 MIN N S		LATITUDE OF VORTEX FIX				
B	107 DEG 34 MIN E W		LONGITUDE OF VORTEX FIX				
C	952 MB 2730	M	MINIMUM HEIGHT AT STANDARD LEVEL				
D	NA	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED				
E	NA DEG	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND				
F	230 DEG 100	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER				
G	150 DEG 14	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND				
H	EXTRAP 952	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.				
I	CI	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE				
J	CI	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE				
K	CI	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE				
L	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.						
M	EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.						
N	DEG MIN N S		CONFIRMATION OF FIX: Coordinates and time				
	DEG MIN E W						
	Z						
O	/		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 5 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.				
P	/ NM		NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY				
Q	REMARKS						
	MAX FL WIND <u>120</u> KT <u>N</u> QUAD <u>1940Z</u> SLP EXTRAP FROM (<u>1500 FT/925 MB/850 MB/ DROPSONDE</u>) <u>700 MB</u> SFC CNTR <u>/</u> NM FROM FL CNTR MAX FL TEMP <u>C</u> NM FROM FL CNTR						

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE

8/2/97

SCHEDULED FIX TIME

AIRCRAFT NUMBER

N42RF

ARWO

WX MISSION IDENTIFICATION

WRRWXP GUILLERMO

08

07

(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE

A	02/1854	Z	DATE AND TIME OF FIX
B	13 DEG 16 MIN N S		LATITUDE OF VORTEX FIX
B	107 DEG 12 MIN E W		LONGITUDE OF VORTEX FIX
C	700 MB 2770 M		MINIMUM HEIGHT AT STANDARD LEVEL
D	NA	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED
E	NA	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND
F	175 DEG 110	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	090 DEG 20	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	957 EXTRAP 957	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	11 CI 3080	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE
J	17 CI 3060	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE
K	NA	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE
L	CLOSED		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C30		EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.
N	13 DEG 16 MIN N S		CONFIRMATION OF FIX: Coordinates and time
N	107 DEG 12 MIN E W		
N	02/1854	Z	
O	12345/7		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.
P	5/5	NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY
Q	REMARKS		
MAX FL WIND 110 KT E QUAD 1850 Z SLP EXTRAP FROM (1500 FT/925 MB/ 850 MB/ DROPSONDE 700 MB) SFC CNTR / NM FROM FL CNTR MAX FL TEMP C / NM FROM FL CNTR FLY DATA CNTR			

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE

8/2/97

SCHEDULED FIX TIME

AIRCRAFT NUMBER

ARWO

WX MISSION IDENTIFICATION

WXWXP GUILLERMO

OB

(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE

A	02/23 ³²	Z	DATE AND TIME OF FIX
	13 DEG 24 MIN (N) S		LATITUDE OF VORTEX FIX
B	107 DEG 53 MIN E (W)		LONGITUDE OF VORTEX FIX
C	700 MB 2683	M	MINIMUM HEIGHT AT STANDARD LEVEL
D	NA	KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED
E	NA DEG	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND
F	305 DEG 100	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	230 DEG 8	NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	EXTRAP 947	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	11 CI 3073	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE
J	20 CI 3052	M	MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE
K	NA CI	C	DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE
L	CLOSED		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C25		EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degree, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. EO9/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.
N	13 DEG 24 MIN N S 107 DEG 53 MIN E W 02/23 ³²	Z	CONFIRMATION OF FIX: Coordinates and time
O	12345/7		FIX DETERMINED BY/FIX LEVEL. FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500ft; 9-925mb; 8 - 850 mb; 7 - 700 mb; 6 - 600 mb; 5 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; NA - Other.
P	2/32	NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY
Q	REMARKS		
MAX FL WIND <u>125</u> KT <u>NE</u> QUAD <u>2222</u> Z SLP EXTRAP FROM (1500 FT/925 MB/850 MB/DROPSONDE) <u>700 MB</u> SFC CNTR <u>1</u> NM FROM FL CNTR MAX FL TEMP <u>C</u> <u>1</u> NM FROM FL CNTR MAX SFC WIND OBSERVED <u>100 KTS</u> <u>6 NM NE OF CTR</u>			

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

DATE : 8/2/97
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N42RF ON 0212Z BLOCKTIME
SUBJECT: Hazardous Duty OFF 1634Z 9.7

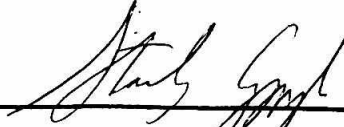
PURPOSE OF FLIGHT: VME Hurr GUILLERMO

Hazardous Duty Pay is required for flight made on 8/2/97
(DATE)

Request based on 10 PENETRATIONS INTO HURR.

Personnel on board authorized Hazard Pay:

CZYZYK, S
CARPENTER, D
BARR, J
McFADDEN, J
BAST, G
McMILLAN, S
ROGERS, M

PILOT/FLIGHT DIRECTOR: 

APPROVED: _____

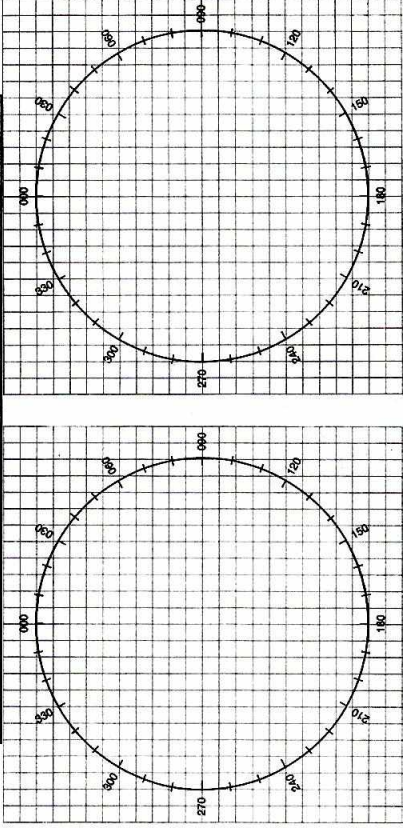
DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: _____

CLEARANCES			
FREQ	ALT	HDG	OTHER
HF F			227.4- 2407Z
			2104130 2406
1316	1811		
10718			285/8.5 KTS
			2325
			2321 2322

MISSION LOG

PAGE 1 OF 1



POSITION REPORT	
1. POSITION	
2. TIME	
3. ALTITUDE	
4. NEXT POSITION	
5. ETA	
6. NEXT POSITION	

EMERGENCY MESSAGE

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

UHF/VOICE VHF/VOICE MF/VOICE HF/CW MF/CW
243.0 121.5 2182 KHZ 8364 KHZ 500 KHZ

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA, NOAA, NOAA

- POSITION _____ N/S _____ E/W AT _____ Z
- HEADING _____ TRUE/MAG
- AT _____ KTS TRUE/INDICATED
- FLIGHT LEVEL OR ALTITUDE _____
- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD
- NATURE OF EMERGENCY _____
- ASSISTANCE DESIRED _____
- PILOT INTENTIONS _____
- WE HAVE _____ ENDURANCE REMAINING

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1625																				
1631																				
1639																				
1658	FM1	1937.3 10526.7	1936.5 10526.7	+1.8 0	1936.4 10526.6	+1.9 +1.1				172 SR	246	042	28	16K	227					END START TAXI TAKEOFF
1749		1553.3 10525.5	1552.5 10525.6	+1.8 +1.5	1552.2 10525.6	+1.1 +1.5				170 SR	263	052	25	16K	250					
1854		1321.9 10712.1	1321.0 10711.6	+1.9 +1.5	1320.4 10711.6	+1.5 +1.5				200 SR	258	025	91	10K	231					1315.9 10712.1
1933		1319.9 10711.2	1318.7 10710.9	+1.2 +1.3	1318.3 10710.8	+1.6 +1.4														1319.9 10715.0
2001		1318.1 10722.0	1316.5 10721.6	+1.6 +1.4	1315.8 10721.4	+2.3 +1.6				142 SR	253	344	18	10K	231					
2042		1317.5 10727.4	1317.5 10726.8	+2.5 +1.6	1316.8 10726.8	+2.7 +1.6														1320.9 955
2117		1320.3 10733.6	1318.0 10733.4	+1.7 +1.2	1317.3 10733.2	+3.0 +1.4														
2154		1325.5 10735.7	1323.7 10734.9	+2.8 +1.8	1322.0 10734.7	+2.3 +1.0				277 QL	251	029	47	10K	231					1322.5 10736.0
2225		1319.3 10743.2	1315.7 10743.2	+3.6 0	1315.4 10743.0	+3.9 +1.2				193 SR	235	104	58	10K	234					
2257		1324.2 10747.9	1320.6 10747.5	+3.6 +1.4	1320.6 10747.2	+4.2 +1.7				307 TL	242	051	36	10K	237					
2332		1324.5 10752.8	1320.4 10752.3	+4.1 +1.5	1320.3 10751.6	+4.2 +1.2														
0003		1326.2 10757.4	1321.6 10757.4	+4.6 0	1321.4 10756.7	+4.8 +1.7														FINAL
0033		1412.8 10713.4	1408.0 10711.9	+4.8 +1.5	1407.7 10711.2	+5.1 +1.2				024 QL	320	154	66	190	223					
0108		1655.1 10629.3	1649.8 10629.4	---	1650.0 10628.5	---				022 SL	281	131	38	190	267					LAND BLOCK IN
0204		2040.7 10515.4	2035.1 10515.6	+5.6 +1.2	2034.4 10514.6	+6.3 +1.8														
0212																				

0024 END OF PATTERN

0200

1+47 1+40 BACK

555
245
1000