

U.S. Dept. of Commerce / NOAA Aircraft Operations Center

Fit ID: 100901H	From:	To:
Fit No: 10-060	Blk In: 0724 0723 1506	ATA: 1459
ETD:	Blk Out: 0714 0715	ATD: 0723
ETE:	Blk Time:	Fit Time:
Sponsor Org: EMC	Program:	Purpose: EARL

AOC Personnel

AC: NEWMAN	Sys Eng: WARNECKE
CP: SWEENEY / MARTIN	Data Sys: RICHARDS TB
Nav: BRAKOB	Radar: CARPENTER
FE: BRAKOB / KLIPPEL / DARBY	GPS/BT: CROUCH
FD: SEARS / WILLIAMS / DAMIANO	Cld Phys: OLNEY
Avionics: BOSKO	LYNCH

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
GAMACHE		
WHLHORN		

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

WX07A EARL8

DEWPT 1

RINU

6 1055 943 mb
6 1217 943 mb

N43RF ERROR SUMMARY

100901H
Hurricane Earl



Flight ID: 100901H1



<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	INE1
Accelerometer	ACC1
Temperature Probe	TT1
Dew Point Probe	TDM1X (BUCK)
Static Pressure	PSF
Dynamic Pressure	PQF1
Vert. Wind	ALTI1
Constants File	n42_hur10v2.adc
Project Directory	/acdata/2010/MET/100901H/

Notes:

There were a data gaps from 073701Z – 073713Z, 123731Z – 123742Z, and 130641Z - 130642Z

The Buck dewpoint probe (TDM1) exhibited erroneous data during the following time period: 140100Z – 141500Z. The data were modified using statistical methods.

There were several occurrences during the flight where dewpoint temperature exceeded ambient temperature during heavy precipitation events. No data modifications were made to either dewpoint temperature or ambient temperature during these aforementioned events.

There were 13 total dropsondes deployed, 11 were good and 2 failed..

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

SPECIAL NOTE!!! The variable names dpj_wgs, dpj_was, and dpj_wz in the netCDF file represent vertical ground, vertical air, and vertical wind speeds respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
	0723Z	1459Z
Aircraft Static Pressure	1011.0mb 1004.2	1012.8mb 1014.1
Corrected Tower Pressure	1007.5mb 1003.4	1014.5mb

Flight Director: A. Barry Damiano/ Ian Sears (813) 828-3310 ext. 3073/3039

Flight ID : 100901H

Launcher S/N:

[illegible]

1ST PASS

100901H

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER
VORTEX DATA MESSAGE				
A	01 / 1055 Z		DATE and TIME of FIX	
B	24 DEG 22 MIN N S		LATITUDE of FIX	
	71 DEG 30 MIN W E		LONGITUDE of FIX	
C	MB NA M		MINIMUM HEIGHT of STANDARD LEVEL	
D	77 KT		ESTIMATE of MAXIMUM SURFACE WIND OBSERVED	
E	83 DEG 18 NM		BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND	
F	167 DEG 111 KT		MAXIMUM FLIGHT LEVEL WIND NEAR CENTER	
G	85 DEG 29 NM		BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND	
H	MB		MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.	
I	8 C 3658 M		MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE	
J	16 C 3639 M		MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE	
K	10 C / NA C		DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE	
L	CLOSED RAGGED EYE CHARACTER: Closed wall, poorly defined, open SW, etc.			
M	C020-25		EYE SHAPE/ORIENTATION/DIAMETER: Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of the major axis in tens of degrees, 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 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.	
N	12345 NA		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; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other	
O	1 / 1 NM		NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY	
P	REMARKS MAX FL WIND 111 110 KT 110 ¹⁰⁴⁹ QUAD 1047 Z			

100901H

2ND PASS

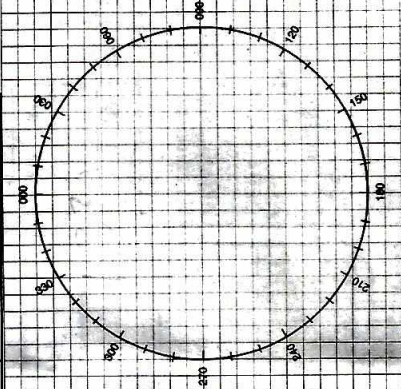
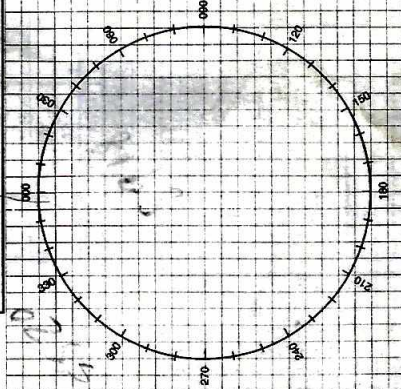
DATE 10-SEP-01	SCHEDULED RX TIME 12 Z	AIRCRAFT NUMBER N42	FLIGHT DIRECTOR SEARS
WX MISSION IDENTIFIER			OB NUMBER
VORTEX DATA MESSAGE			
A	01 / 1217 Z	DATE and TIME of FIX	
B	24 DEG 33 MIN N S	LATITUDE of FIX	
	71 DEG 45 MIN W E	LONGITUDE of FIX	
C	400 MB 2605 M	MINIMUM HEIGHT of STANDARD LEVEL	
D	77 KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED	
E	162 DEG 18 NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND	
F	256 DEG 94 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER	
G	162 DEG 18 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND	
H	943 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.	
I	11 C / 3064 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE	
J	19 C / 3064 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE	
K	13 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE	
L	OPEN SW	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 the major axis in tens of degrees, 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 5 NM. CO8-14=Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.	
N	12345 Z	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; 1-1500 ft; 9-925mb; 8-850mb; 7-700mb; 5-500mb; 4-400mb; 3-300mb; 2-200mb; NA-Other	
O	1 / 1 NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY	
P	REMARKS OUTBOUND MAX FL WIND 113 KT NE QUAD 1224 Z MAX OUTBOUND SFC WINDS 97 NE 357 DEG @ 17 NM 1221Z		

NYR 130.7

6586 (134.8 2000) 6628

MISSION LOG 132.3 135.2

CLEARANCES			
FREQ	ALT	HDG	OTHER
129.35	120	L	KMCF AF SQ 1027
121.3			GUARDALUPE
114.75			SQ 7426
127.00	81057		6586 PM 6628 SEC
114.1	81051		5520 8918
			11330 PM 8918 SEC



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 8384 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

NATURE OF EMERGENCY

ASSISTANCE DESIRED

PILOT INTENTIONS

ENDURANCE REMAINING

TIME	FIX TYPE	POSITION	INS 1 POSITION	KERR	INS 2 POSITION	KERR	MH	VAR	TH	DR	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
0709	END																				
0715	END																				
0731	XV	13-19.6 54-36.1	13-19.6 54-36.1	0	13-19.6 54-36.1	0	316	15W	301	1L	300	245	115	2	10.5	241	861	25	06	0757	NYR 5520 6645
0821	A	20-10.1 65-28.3	20-10.1 65-27.6	-13 +7	20-10.1 65-27.6	-13 +7	333	13W	320	0	320	305	130	18	120	287	1	329	105	1028	POS 2000 CT NYR 6586 4 F1
1021	A	24-03.3 73-14.8	24-03.3 73-15.3	-2.4 -1.5	24-03.3 73-15.3	-2.4 -1.5	131	10W	121	5R	126	300	330	50	120	255	3	100	020	1147	MIAMI CTR AAA 132.3 100-120
1127	A	26-42.8 74-55.1	26-42.8 74-55.8	+4.5 -1.7	26-42.8 74-55.8	+4.5 -1.7	285	9W	276	4L	273	287	055	30	120	265	18V	337	110	1433	
1429	A	26-49.9 80-55.2	26-49.9 80-55.2	+2.2 -2.3	26-49.9 80-55.2	+2.2 -2.3															
1459	LAND																				
1506	BLK																				

6059B 24-33 71-49

15

24-50 71-46

1355Z :05015

28/24-29 28/24-29 28/24-29

