

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 26107241	From: KNZY	To: KNZY
FLT #:	Blk In: 0039 Z	Lnd Time: 0032 Z
ETD: 1700 Z	Blk Out: 1653 Z	T/O Time: 1659 Z
ETE: 7410	Total Blk: 7.8	Total Flt: 7.6
Sponsoring Org: NHC	Program: HFIP	Purpose: DORA

AOC Flight Crew

Aircraft Commander: HALVERSON	Data System: BOSKO
Co-Pilot: FERNES / NELSON	Avaps: RICHARDS
Navigator: KIDDER /	System Engineer:
Flight Eng: KLIPPER / DARBY	AA:
Flt Director: SEARS / PARRISH	AA:
Avionics: OLNEY	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back.

# of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure				

ATIS - Takeoff

ATIS - Land

Data Source	Number	Data Disposition / Date / Quality
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Flight Level Tapes

Radar Tapes

Dropsondes

Good:      Bad:      Sent:

AXBT

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Recco  
Times:      Fix #      Fix Time

Storm Name: 0304E DORA

Mission ID:

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID:

T/O Time:

Z

Lnd Time:

Z

Name (Last, First)

Activity on Aircraft

Affiliation

BLACK

SCI

HRD

LEIGH

SCI

HRD

Remarks:

23 99

~~24 39~~

16 53

46

7.8

23 8 1/2

24 32

16 59

7 33

7.6



## N43RF ERROR SUMMARY EPAC Tropical Storm DORA MISSION



**Flight ID: 20110724I1**

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	INE1
Accelerometer	ACCI1
Temperature Probe	TT1
Dew Point Probe	TDM2X
Static Pressure	PSF
Dynamic Pressure	PQF1
Vert. Wind	ALTI1
Constants File	/acdata/adc/43_11v3.adc
Project Directory	/acdata/2011/MET/20110724I1

### Notes:

There were no data gaps.

Dewpoint sensor 2 (TDM2 [EdgeTech]) generated erroneous data between 172910Z – 172916Z. The erroneous data were replaced with dewpoint sensor 1 (TDM1 [ Buck]) output via direct substitution: TDM2 = TDM1.

During the flight there were instances where dewpoint temperature values exceeded derived ambient temperature values resulting in humidity values above 100%. These situations occurred during heavy precipitation events. All other instruments worked optimally during the flight.

There were seventeen (17) GPS dropsondes deployed...17 good 1 bad.

There were twelve (12) AXBTs deployed... 12 good 1 bad.

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 speeds , vertical air speeds 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(1659Z) Landing(0032Z)**

Aircraft Static Pressure	1015.4mb	1014.5 mb
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Corrected Tower Pressure	1015.2mb	1014.3mb
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Flight Director:	Ian Sears	(813) 828-3310 ext. 3039
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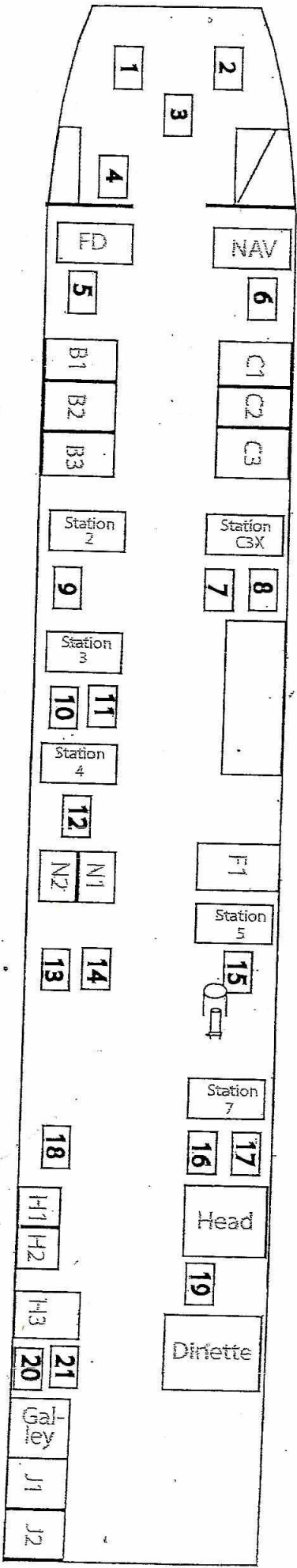


# NOAA AIRCRAFT OPERATIONS CENTER

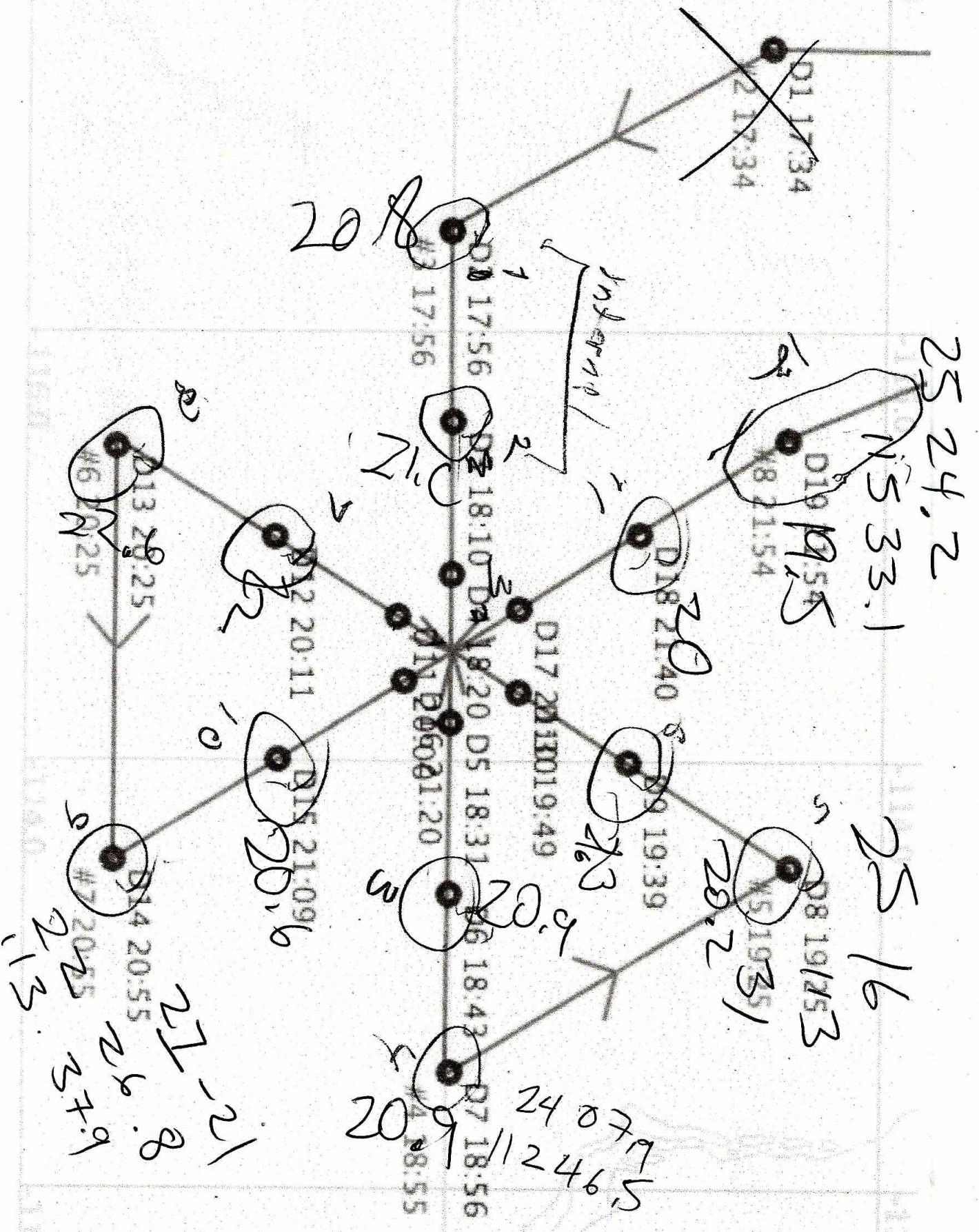
2461  
11467

Flight ID 0110724T

13



1. HALVERSON PILOT
2. KEENS COPILOT
3. KLIPPEL FLIGHT ENGINEER
4. DELSON STATION 1
5. SEARS FLIGHT DIRECTOR
6. LEDDER NAVIGATOR
7. BLAKE STATION C3X
8. PARLISH STATION C3X
9. PARLISH STATION 2
10. LEIGHTON STATION 3
11. BOSKO STATION 3
12. BOSKO STATION 4
13. PARLEY PROJECT SEAT
14. PROJECT SEAT
15. OLNEY STATION 5
16. STATION 7
17. STATION 7
18. RICHAARDS STATION 8
19. DINETTE
20. GALLEY
21. GALLEY





# DORA DAY 3 PASS 1

DATE		SCHEDULED RX TIME		AIRCRAFT NUMBER		FLIGHT DIRECTOR	
WX MISSION IDENTIFIER						OB NUMBER	
VORTEX DATA MESSAGE							
A	24 1937 <del>031 44</del>	Z	DATE and TIME of FIX				
B	49 114 28	DEG MIN N S	LATITUDE of FIX				
C	850 MB 1497	M	MINIMUM HEIGHT of STANDARD LEVEL				
D	33	KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED				
E	232 DEG 21	NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND				
F	258 DEG 18	KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER				
G	219 DEG 54	NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND				
H	1009	MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.				
I	17 C 11424	M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE				
J	19 C 11438	M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE				
K	18 C 11438	E	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE				
L	NA		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.				
M	NA		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	13 45		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 / 3	NM	NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY				
P	REMARKS						
MAX FL WIND 18 SW KT QUAD 1923 Z MAX OUTBOUND FL WIND NE 30 KT 1953 Z							

2ND  
PASS

336 11.6

DATE		SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR
WX MISSION IDENTIFIER				OB NUMBER
VORTEX DATA MESSAGE				
A	2 <del>3</del> 2053Z	DATE and TIME of FIX		
B	23 DEG 59 MIN N S	LATITUDE of FIX		
	114 DEG 34 MIN W E	LONGITUDE of FIX		
C	850 MB 1498 M	MINIMUM HEIGHT of STANDARD LEVEL		
D	NA KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED		
E	NA DEG NA NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND		
F	64 DEG 2027 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	323 DEG 34 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	19 C / 1425 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE		
J	19 C / 1446 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE		
K	18 C / 21 C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	NA	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	NA	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	1 3 4	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 OUT 2053Z SW 2104 MAX FL WIND 206 KT QUAD 2045			



DATE		SCHEDULED RX TIME		AIRCRAFT NUMBER		FLIGHT DIRECTOR	
WX MISSION IDENTIFIER						OB NUMBER	
VORTEX DATA MESSAGE							
A	24 2215 Z			DATE and TIME of FIX			
B	24 DEG 2 MIN N S			LATITUDE of FIX			
	114 DEG 42 MIN W E			LONGITUDE of FIX			
C	850 MB 1496 M			MINIMUM HEIGHT of STANDARD LEVEL			
D	NA KT			ESTIMATE of MAXIMUM SURFACE WIND OBSERVED			
E	NA NM			BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND			
F	79 DEG 30 KT			MAXIMUM FLIGHT LEVEL WIND NEAR CENTER			
G	84 DEG 66 NM			BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND			
H				MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.			
I	17 C / M			MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE			
J	18 C / M			MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE			
K	18 C / 21 C			DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE			
L	NA			EYE CHARACTER: Closed wall, poorly defined, open SW, etc.			
M	NA			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	134 8			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 / 3 NM			NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY			
P	REMARKS MAX FL WIND 733 NE KT 20 QUAD 2104 Z BS						

## NOAA • AOC • SED

## N43RF AXBT DROP LOG

Project : Hurricane '09

**Mission :**

IS DORA

Flight ID : 20110724T

Operators: OLDEN / RICHARDS

Take Off :

Landing :

[illegible]