

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

FLT ID: 100827H	From: KMCF	To: TBPR
Flt No: 10 - 057	In: 1833 Z	On: 1825 Z
ETD: 1330 Z	Out: 1243 Z	Off: 1252 Z
ETE: 6 + 05	Blk Time: 5 + 50 (5.8) Hrs	Flt Time: 5 + 33 (5.6) Hrs
Sponsoring Org: HRD	Program: Research	Purpose: Ferry

AOC Flight Crew

Aircraft Commander: Newman	Data System: Bosko
Co-Pilot: Sweeney / Martin	AVAPS: Lynch, T-
Navigator: Brakob-	System Engineer:
Flight Eng: Klippel / Darby	AA: Richards
Flight Director: Damiano / Williams	AA: Warnecke
Avionics: Olney	Crew Chief: Crouch

Participating Scientists / Visitors

(18)

Name (Last, First)	Activity on Aircraft	Affiliation
Rogers, Rob	PI	HRD
Unihorn, Eric	SCI	HRD
Murillo, Shirley	SCI	HRD
Cione, Joe	SCI	HRD

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

Recco Times

Fix #

Fix Time

Storm Name: TRAIN

Mission ID: NOAA9 WXWXA

U.S. DEP'T OF COMMERCE / NMAO / NOAA / AIRCRAFT OPERATIONS CENTER

FLT ID: 100827H		TIME OFF: 1252 Z		TIME ON: 1825Z Z	
A/C - Takeoff		WX Station - Takeoff		A/C - Land	
Pressure		1014.8 2998.		1006.5	
10150		1014.8 2998.		1006.5	
ATIS - Takeoff		1155 07006KT 10SM CLR 25/25 A2998			
ATIS - Land		1 / 15006 10 FEW016TCU 31/25 QNH 1013			
Data Source	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / Cds					
Video Tapes/DVDs					
Dropsondes		Good:	Bad:		
AXBT					
AXCP					
AXCTD					
SONOBUOY					

REMARKS:

- TD2 went out in beginning, restart brought it back



NOAA P-3 N42RF
Ferry Flight KMCF-TBPB
27 Aug 2010



Flight ID: 100827H

<u>Sensor or system</u>	<u>Variable Name</u>
Inertial	INE1
Accelerometer	ACCI1
Temperature Probe	TT1
Dew Point Probe	TDM1X
Altitude (for vertical wind)	ALTI1
Static Pressure	PSF
Dynamic Pressure	PQF1
Constants File	n42_hur10v2.adc
Project Directory	/acdata/2010/MET

Local Met Data:	<u>Takeoff (1252Z)</u>	<u>Landing (1825Z)</u>
Aircraft Static Pressure	1015.1 mb	1006.5 mb
Tower Pressure	1014.8 mb	1006.3 mb

Notes

There were no data gaps.

Altnv1, Novatel GPS has small 10-30M spikes throughout flight. Alti2, radar altimeter is noisy and has spikes throughout the flight. Alti1, RINNU GPS is default. Novatell Lat and Lon latnv1, lonnv1 exhibit small spikes at the end of the flight. Lat1 and Lon1 are default.

TDM2 dropped out from 130627Z – 135333Z, then again before descent from 181610Z-182208Z. TDM1 is default but was substituted for TDM2 during the following times when TDM1 was overshooting actual TD: 141551Z-141629Z, 151714Z-151815Z and 174536Z-174621Z.

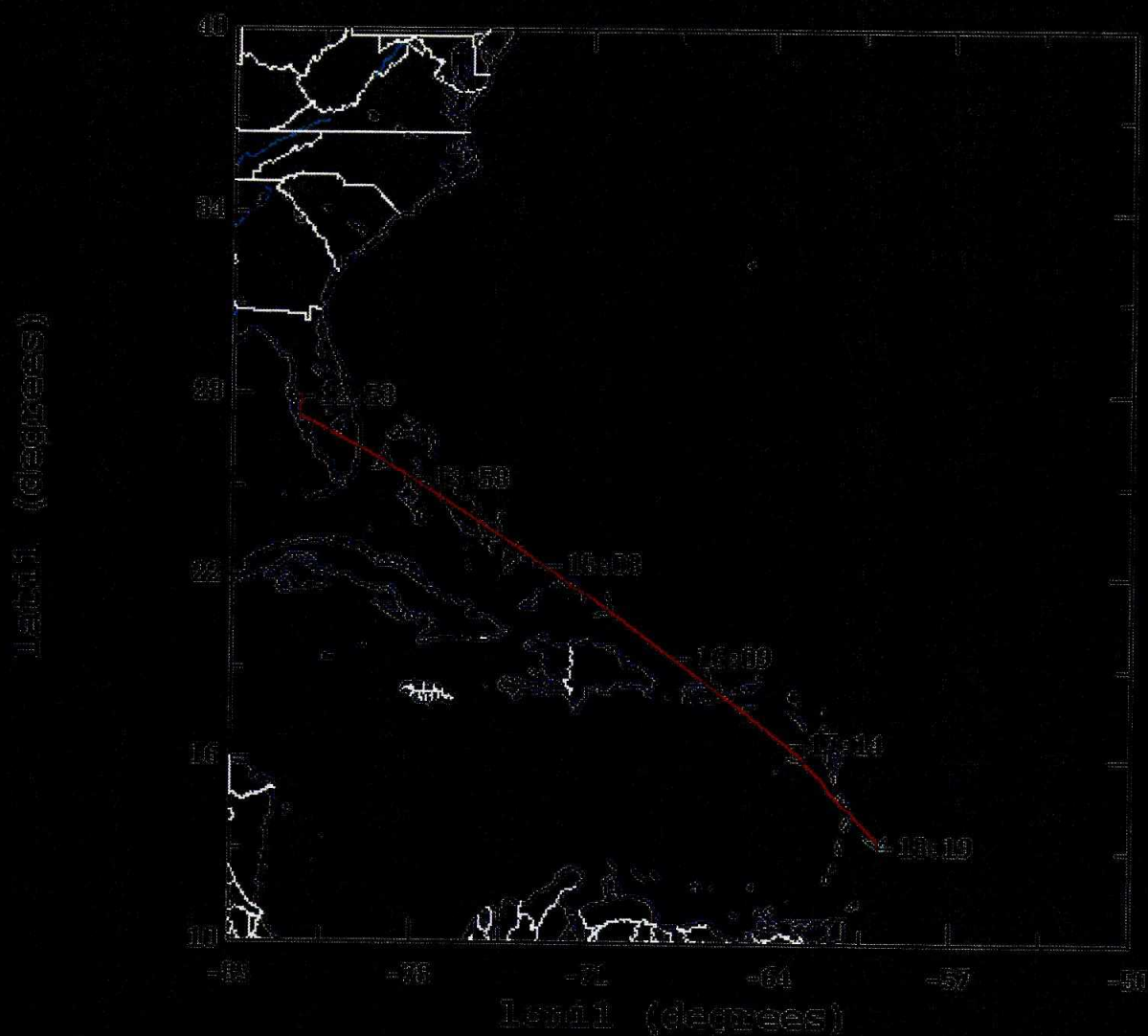
All other instruments appeared to work optimally.

No instruments were released.

Flight Director: Barry Damiano / Jess Williams
Phone #: (813) 828-3310 ext. 3041

N42 Ferry KMCF-TBPE

08/27/2010 UTC, 12:53:21-18:19:40



	mean	sigma	min	max
Latitude (degrees), 1 c/sec	20.17	4.22	13.12	27.30
Longitude (degrees), 1 c/sec	-70.61	6.36	-82.48	-58.73

210 0.50 17

DATE		SCHEDULED FIX TIME	AIRCRAFT NUMBER	ARWO
WX MISSION IDENTIFICATION			STORM NUMBER IDENTIFIER	
			OB	
VORTEX DATA MESSAGE				
A			DATE AND TIME OF FIX	
B	DEG	MIN N S	LATITUDE OF VORTEX FIX	
	DEG	MIN E W	LONGITUDE OF VORTEX FIX	
C			MINIMUM HEIGHT AT STANDARD LEVEL	
D			ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED	
E	17 30006		BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND	
F	146 05		MAXIMUM FLIGHT LEVEL WIND NEAR CENTER	
G	300 02		BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND	
H	1012 EXT		MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.	
I	-2 / 5170		MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE OUTSIDE EYE	
J	-1 / 5171		MAXIMUM FLIGHT LEVEL TEMP/PRESSURE ALTITUDE INSIDE EYE	
K	-29 / NA		DEWPOINT TEMP/SEA SURFACE TEMP INSIDE EYE	
L	1 NA		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.	
M	NA E11/15/5 CO		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	12345 /		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.	
O	1 /		NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY	
P	REMARKS MAX FL WIND _____ KT _____ QUAD _____ Z MAX OUTBOUND FL WIND _____ KT _____ QUAD _____ Z SLP EXTRAP FROM (Below 1500 FT/ 925 MB/ 850 MB/ DROPSONDE) SFC CNTR _____ / _____ NM FROM FL CNTR MAX FL TEMP _____ C _____ / _____ NM FROM FL CNTR SURFACE WIND OBSERVED VISUALLY			
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.				

350
126

Figure 5-4. Vortex Data Message Worksheet

Mission/Storm Info:

NON HD

Ferry TOTBPP

t/o wx:

metar/taf:

VRB UNL SCT150 A2996

Climb Turb/ice:

Flight:

Cloud tops:

~~NO~~ ~~IS~~ but SHRA POSS

Precip Tops:

Few 35-40
30,000 FT

Movement:

W 10-15kt

FL wind:

SE 20kts VRB E 10kt
turb: NO PIRADS

landing wx:

descent turb/ice:

13005KT UNL

taf:

Lgt winds SCT018

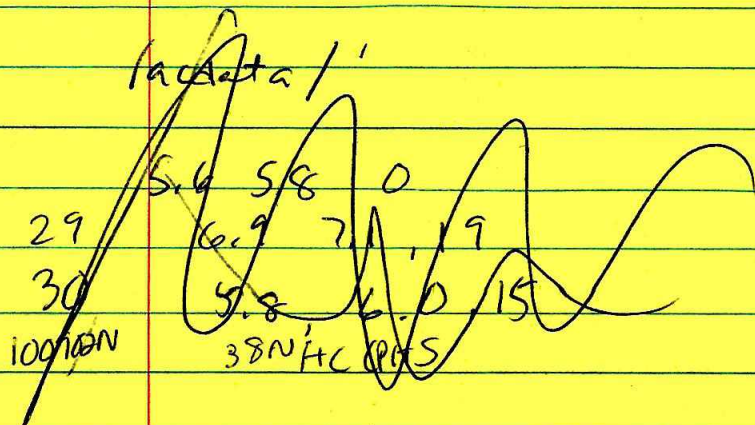
local conditions:

Sea Salt/Volcanic Ash:

100827H

altid - radar noisy + spikes

altid is more noisy than altvul but doesn't jump or spike
altvul spikes 165320Z - 165446Z, 172207Z, 172625Z - 172705Z
- weird jumps



altvul small spikes
pst is good

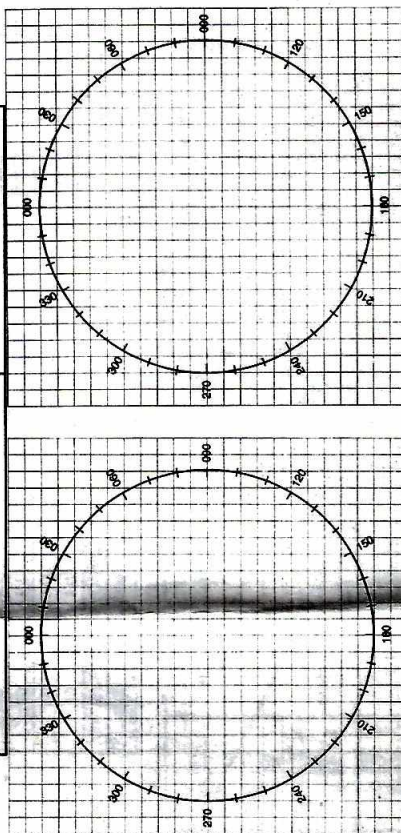
td2 goes out 130627Z - 135333Z, 181610Z - 182208Z

td1 jump 141551 - 141629 - replace w/ td2
151714 - 151815Z, 174536Z - 174621Z

"B": 1155Z 07016 V10 CL 25/25 29.98 -48 ILS 4

MISSION LOG PAGE 1 OF 1

CLEARANCES			
FREQ	ALT	HQD	OTHER
119.9	116K	R08D	CNF 12190 TD S86021
132.35	120	180	DRGTO 551CROW
135.7			OTR 1355 DBR



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:

UHFVOICE VHFVOICE MFVOICE 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 _____ 18 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
1238	ENG	N	N		N															
1242	TAXI	W	W		W															
1255	XV	27-52.7 82-19.7	27-52.7 82-19.7	0 0	27-52.7 82-19.7	0 0														MC 085/10 ✓
1355	A	27-52.7 82-19.7	27-52.7 82-19.7	-1.3 -1.2	27-52.7 82-19.7	-1.3 -1.2														MC 085/10 ✓
1455	A	27-52.7 82-19.7	27-52.7 82-19.7	-1.3 -1.2	27-52.7 82-19.7	-1.3 -1.2														MC 085/10 ✓
1555	A	27-52.7 82-19.7	27-52.7 82-19.7	-1.3 -1.2	27-52.7 82-19.7	-1.3 -1.2														MC 085/10 ✓
1655	A	27-52.7 82-19.7	27-52.7 82-19.7	-1.3 -1.2	27-52.7 82-19.7	-1.3 -1.2														MC 085/10 ✓
1755	A	27-52.7 82-19.7	27-52.7 82-19.7	-1.3 -1.2	27-52.7 82-19.7	-1.3 -1.2														MC 085/10 ✓
1825	LAND																			
1838	BLK																			

1718Z "B": ILS09 150/6 V10km Fw1,600 31/25 29.91 42