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

FLT ID: 20130913I1	From: KMCF	To: KMCF
FLT #:	Blk In: 0137 z	Lnd Time: 0129 z
ETD: 1800 z	Blk Out: 1756 z	T/O Time: 1814 z
ETE: 8+00	Total Blk: 7.7	Total Flt: 7.3
Sponsoring Org: HRD	Program: PHX	Purpose: TS INGRID TDR

AOC Flight Crew

Aircraft Commander: NELSON	SSA: NAEHER
Co-Pilot: SWEENEY, PRICE	AVAPS: NEWNAM
Navigator: SIEGEL	Scientists: Eric UHLHORN (HRD)
Flight Eng: DARBY, ~~HLYSTEK~~	Scientists Tomi VUKICEVIC (HRD)
Flt Director: HENNING FLAHERTY	Scientists Heather HOLBACH (FSU)
SEB: PAUL, PEEK,	Scientists: Paul CHANG Joe SAPP
Crew Chief:	Visitors: / ~~[illegible] JELENAK~~

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	PSM 2 1011.1	29.87 (STA 1011.3)	PSM #2 1010.0	29.85 (STA 1010.6)

AS REQUIRED BY ORM	YES / NO	REMARKS
VOLCANIC ASH		
SCIENCE MISSION WITHIN BOUNDARY LAYER		
LACK OF PRECIPITATION		
RELATIVE HUMIDITY AT OR ABOVE 80%		
LARGE AIR-SEA TEMPERATURE GRADIENT		
HIGH SURFACE WINDS		
LONG FETCH AND/OR DURATION OF SFC WIND		
SEA SALT ACCRETION FORECAST		
SEA SALT ACCRETION OBSERVED		

Dropsondes	10	Good: 10	Bad: Ø	Sent: 10
AXBT	10	Good: 9	Bad: 1	Sent: 9

List other data sources in Remarks section

Remarks (Storm VDM Identifier, Mission ID, Fix Times)

Fix #	VDM Ob Num	Fix Time / SLP

Storm Number Identifier (VDM): AL102013
(ie: AL072012)

TCPOD/WSPOD Mission ID: NOAA3 0410A INGRID
(ie: NOAA2 2418A SANDY)

Remarks:

19.5 95.4

DC-8 145 825 T/O 29.89

TDM.1 noisy w spike use #2

360 RO

INB 2058z

2145z

land 2358z 29.84
0058 29.85

TTM#1 dept. ~2034-2049z

desc 2048z
IP 2100
2243 exit

N43RF ERROR SUMMARY
TS INGRID KMCF - KMCF

Flight ID: 20130913I1

Sensor or system	Number or Name
INE (for wind derivation)	INE1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.1
Dew Point Probe	TDM.2 (Edgetech)
Altitude (for vertical wind)	AltGPS.3 (NOVATEL)
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Project Directory	/acdata/2013/MET/20130913I1

Notes:

There were no data gaps.

Dewpoint sensor #1 (TDM.1Buck) and #2 (TDM.2 Edgetech) both performed relatively well in the storm environment (although TDM.1 was a bit noisy). Late in the flight TDM.1 ran away (too warm) so TDM.2 was selected for post processing. Both dew pointers showed intervals of supersaturation in heavy precip where dew point briefly exceeded ambient temp (resulting in RH between 100% and a max of 119%). The TDL (TDM.3) was erratic and unusable.

Total temperature sensor #2 (TTM.2) was noisy and displayed an oscillation on the order of approx 0.6 deg C when compared to TTM.1 therefore TTM.1 was selected for post-flight processing. There was also a period just prior to descent into the storm environment (from 2034 to 2049z) where TTM.1 ran away.

All other instruments worked optimally during the flight.

Novatel (AltGPS.3) altimeter output was selected for post-flight processing.

	Takeoff (1814Z)	**Landing (0129Z)**
Aircraft Static Pressure	1011.1 mb	1010.0 mb
Corrected Tower Pressure	1011.3 mb	1010.6 mb

10 dropsondes and 10 AXBT deployed. All but one AXBT were good and transmitted.

Flight Director: Richard Henning (813) 828-3310 ext. 3086

NOAA • AOC • SED N43RF AVAPS DROP LOG Lead Tech: Dana Naeher

Project: Hurricane 2013 Mission: AL102013 TS Ingrid Flight ID: 20130913I1

Take Off : 1814Z Landing: 0128Z Flt Dir : Hemmigo

	Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
BT	1	112 115 331	1	Ø	210033	JKW	HFIP		✓
BT	2	112 115 190	2	-.6	211203		HFIP		✓
BT	3	112 115 341	3	Ø	211853		HFIP		✓
BT	4	112 115 203	4	-.5	212629		NWS	Center	✓
BT	5	112 115 102	5	Ø	213450		HFIP		✓
BT	6	112 115 137	6	-.6	214016		HFIP		✓
BT	7	112 115 156	7	Ø	215141		HFIP		✓
BT	8	112 065 299	8	-.6	220452		NWS	Center - landed w/o GPS Data	✓
BT	9	112 115 114	1	-.4	221842		HFIP	~~Splashed w/o GPS Data~~	✓
BT	10	112 115 060	2	-.7	224245		HFIP	28 55T	✓
	11	~~112 115 057~~	~~4~~	~~-.4~~					
	12			-.4					
	13								
	14								
	15								
	16								
	17								
	18								
	19								
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	21								
	22								
	23								
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	25								
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	27								
	28								
	29								
	30								
	31								
	32								
	33								
	34								

CLEARANCES

FREQ	ALT	HDG	OTHER
	↗12K		CAF L 190R ↗1,600
	↗16K		16K +10 119.65 7461
	↗FL180		HOU @ MINOW (135.77) @
			MERIDA ~~[illegible]~~ 128.2 (1138) PM 8846 SEC
			SQ 7326 ✓
			123.75 @ TABSA
			128.3
			120.9 for relay to Merida
		veracruz	120.4
		MK CTR	128.0 MA
2984			128.7 133.9

MISSION LOG

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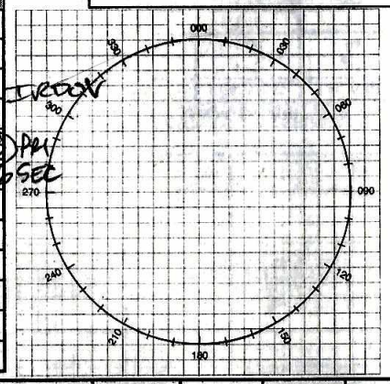

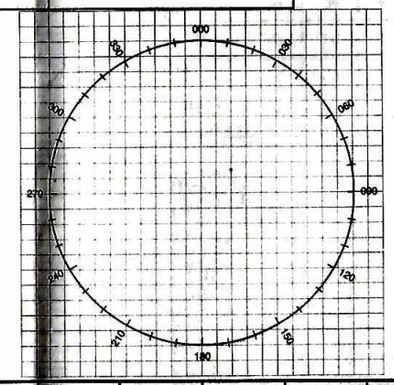

POSITION REPORT

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 43, NOAA 43, NOAA 43

- 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 16 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	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1749	START																				
1756	TAXI																				
1814	T/O																				
1819	X✓	N 27 38.2 W 82 41.2	27 38.2 82 41.2	0 0	27 38.0 82 41.3	+.2 -.1	269	5W	264	1R	265	239	037	5	↑120	238					MCF 215/16
1910	△	25 32.8 80 41.9	25 32.2 80 41.2	[illegible]	25 [illegible] 80 [illegible]	[illegible]	[illegible]	[illegible]	335	2L	332	304	011	14	FL200	297					
2010	△	22 51.1 91 04.6	22 51.1 91 04.4	0 +.2	22 50.4 91 06.9	+.7 +2.3	212	1E	213	2R	215	314	082	9	FL200	308					
2110	△	19 32.2 94 16.7	19 30.4 94 14.2	+.2 +1.9	19 32.9 94 13.8	-.7 +2.9	263	3E	266	5R	271	243	167	20	R080	238					
2210	△	19 29.6 95 24.6	19 29.5 95 21.8	+.1 +2.8	19 30.8 95 21.7	-1.2 +2.9	002	4E	006	4L	002	234	078	19	R080	240					
2310	△	21 54.0 93 34.8	21 54.9 93 32.5	-.9 +2.3	21 59.0 93 34.0	-5.0 +.8	058	3E	061	2L	059	262	124	16	FL230	263					
0010	△	24 19.5 88 35.3	24 21.0 88 34.8	-1.5 +.5	24 27.2 88 36.6	-7.7 -1.3	064	1W	063	0	063	320	167	6	FL230	321					
0110	△	27 18.7 83 45.6	27 18.7 83 44.7	0 +.9	27 17.5 83 40.9	+1.2 +4.7	070	4W	066	1L	065	325	228	9	070	318					
0128	LAND	KMCF																			
0137	BLOCK																				

MISSION LOG	PAGE ___ OF ___

FIX TYPES:
(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
2126	(G)	N 19 09.2 W 095 19.5																			
2205	(G)	N 19 12.5 W 095 21.4																			