

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

AOCWF1

Flt ID: 0809064	From: KMCF	To: BT TISX
Flt No: 08-059	Blk In: 2100Z	ATA: 2056Z
ETD: 1100Z	Blk Out: 1047Z	ATD: 1053Z
ETE:	Blk Time: 10:13 (10.2)	Flt Time: 10:03 (10.1)
Sponsor Org: NESDIS	Program: OCEAN WINDS HURRICANE	Purpose: H. IKE NORTH OF PUERTO RICO

AOC Personnel

AC: NELSON ✓	Sys Eng: ROGERS ✓
CP: NEWMAN / GIREMONTE	Data Sys:
Nav: GALLAGHER ✓	Radar:
FE: BAST / KLIPPEL ✓	GPS/BT: BOSKO / GREENE ✓
FD: DAMIANO ✓	Cld Phys:
Avionics: OLNEY ✓	DARBY ✓

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG ✓	PI	NESDIS
JELENAK ✓	ASST PI	NESDIS
CHU ✓	C-SCAT	UMASS
STOFFELN, A ✓	OBS	KR KNMI

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #) NOAA2 0309A IKE

1448Z Sat overpass

75nm legs TEAL 72 0655Z 22.25° 104KTS NW QUAD
EYEWALL DEOPS 182 962mkt 66°34'

DP 23°05' 69°30'

Pass 22°10' 68°30'

LF STOP 134650Z

150720 nm setup

LF inop after second pass

7 penetrations

22.4 67.1 092 253/14

182 22.1 69.0

260/13

Radar 8K alt

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AOCWF2

Flt ID: 080906H Time Off: 1053Z Time On: 2056Z

	A/C (Take-Off)	Wx Station (Take-Off)	A/C (Land)	Wx Station (Land)
Pressure	1011.97	1012.95 29.91 1012.4	1010.0	29.82 1012.2

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	18	5 bad; 17 NESDIS; 1 NHC

Video

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

7410Z

951

EXTRA 953 1906 1826Z

2133

68056 956

2148 EXTRA

17072

6839 2146 1600Z

957 EXTRA

6901 2136 1749Z

EXTRA 958

1455Z

2148 EXTRA

6816

2148

1415Z

23 26 2805

0953Z

1915Z 2130 6901Z 951

10 08 09



N42RF ERROR SUMMARY

H. IKE MISSION/FERRY TO ST. CROIX



Flight ID: 080906H

<u>Sensor or system</u>	<u>Number or Name</u>
Inertial	INE1
Accelerometer	ACC1
Temperature Probe	TT1
Dew Point Probe	TDM2X (EdgeTech)
Static Pressure	PSF
Dynamic Pressure	PQF1
Vert. Wind	RA159X
Constants File	n42_hur08v3.adc
Project Directory	/acdata/2008/hur08

Notes:

There was one data gap: 150731Z – 150737Z. Beginning with the H080829 H. Gustav flight and continuing through the H080912 H. Ike flight, there was observed a 3 to 4 second lag between all INE1 and INE2 outputs. INE1 was selected since it best corresponded with the analog output.

There were no liquid water sensors available for the flight.

The APN-159 (RA159X) radar altimeter output had two time periods of erroneous values. The RA159 data glitches were fixed using statistical techniques during the following time periods: 110430Z – 110630Z and 1110Z – 111200Z.

Measured dewpoint temperature #2 (EdgeTech)...TDM2...exhibited several time periods of erroneous data during the flight. For 120253Z – 120606Z, 140600Z – 140800Z and 141100Z – 141300Z the erroneous data was removed by substituting TDM3(Maycomm/TDL) output,

TDM2 = TDM3

For 150000Z – 150400Z the erroneous TDM2 data was removed and patched using statistical techniques.

Fuselage dynamic attack pressure (PQAF) had a data spike between 174300Z – 174500Z. The spike was removed and patched using statistical techniques.

All other instruments worked optimally during the flight.

Four (4) GPS dropsondes were deployed with 3 being good. Three (3) tempdrop messages were sent to NHC.

	Takeoff 1053Z	Landing 2056Z
Aircraft Static Pressure	1011.7mb	1010.0mb
Corrected Tower Pressure	1012.4mb	1010.6mb

Flight Director: A. Barry Damiano (813) 828-3310 ext. 3073



N42RF ERROR SUMMARY KU-SCAT CALIBRATION



Flight ID: 080731H

<u>Sensor or system</u>	<u>Number or Name</u>
Inertial	INE1
Accelerometer	ACC1
Temperature Probe	TT1
Dew Point Probe	TDM2X (EdgeTech)
Static Pressure	PSF
Dynamic Pressure	PQF1
Vert. Wind	RA159X
Constants File	n42_hur08v3.adc
Project Directory	/acdata/2008/hur08

Notes:

There were no data gaps.

There were no liquid water sensors available for the flight.

Measured dewpoint temperature #2 (EdgeTech)...TDM2...had erroneous data occur at 152600Z – 152700Z. The erroneous data was removed and patched using statistical techniques and data from TDM3...TDL/Maycomm.

All other instrumentation worked optimally.

Three (3) GPS dropsondes were deployed all being good. No messages were sent to NHC.

RA159X type 1349Z
done later 1435Z
5/20/09 1450Z

Takeoff
1251Z

Landing
1535Z

Aircraft Static Pressure

1015.4mb

1015.4mb

Corrected Tower Pressure

1015.5mb

1015.7mb

Flight Director: A. Barry Damiano (813) 828-3310 ext. 3073

21 05(9 5512

Turn Pt	Type	FixPoint	Latitude	Elev	Aspd	MH	TH	Leg Time	Leg Dist
DTD	Description	Longitude	MV	Bank	Wind	MG	TG	Clock Time	Total Dist
1	*M	KMCF/A	N 27 50.96	14FT	270T	122	118	00+00+00	0.0
			W082 31.27	4.5W				00:00+00	0.0
2	*M	PEI	N 28 40.80	19FT	270T	122	118	00+00+00	0.0
			W080 09.19	5.9W				00:32+50	147.8
3	*M	TURPS BR	N 26 40.78	unk	270T	096	090	00+04+03	18.3
			W079 44.80	6.2W				00:36+53	166.0
4	*M	MIXAE BR	N 26 40.72	unk	270T	096	090	00+06+03	18.7
			W079 29.47	6.5W				00:39+56	179.8
5	*M	HALBI BR	N 26 40.61	unk	270T	097	090	00+04+09	18.7
			W079 08.59	6.6W				00:40+05	198.5
6	*M	ULATA B	N 26 40.45	unk	270T	099	092	00+00+57	4.8
			W079 03.30	6.6W				00:45+02	202.5
7		ZFP BR63	N 26 33.32	7FT	270T	116	110	00+04+39	20.9
			W078 41.87	6.8W				00:49+41	223.7
8	*M	BARTS BR	N 26 59.02	unk	270T	125	118	00+16+11	72.8
			W077 30.94	7.5W				01:06+32	290.5
9	*M	MAMML B	N 25 32.30	unk	270T	127	120	00+11+55	53.6
			W076 38.86	7.9W				01:17+47	350.1
10		DIAZZ BR	N 24 31.29	unk	270T	126	120	00+17+56	80.7
			W075 22.14	8.6W				01:36+42	431.8
11		COBBL B	N 24 45.41	unk	270T	129	121	00+02+33	11.5
			W075 11.28	8.7W				01:38+15	442.3
12	*M	LOGVN B	N 24 32.00	unk	270T	129	121	00+03+46	26.1
			W074 46.63	8.9W				01:44+03	408.4
13	*M	BRGO B	N 24 25.00	unk	270T	130	121	00+03+01	13.6
			W074 33.93	9.0W				01:47+04	481.9
14			N 23 05.00	unk	250T	114	106	01+09+36	290.0
			W069 30.00	11.5W				02:56+40	771.9
15		LIKE	N 22 10.00	unk	250T	146	134	00+18+43	78.0
	*M	LIKE	W068 30.00	12.0W				03:15+23	849.9
16			N 21 20.00	unk	250T	144	132	00+17+58	74.8
	*M		W067 30.00	12.4W				03:38+21	924.8
17			N 23 05.00	unk	250T	012	012	00+25+07	104.6
	*M		W067 30.00	12.6W				03:58+28	1029.4
18		LIKE	N 22 10.00	unk	250T	236	226	00+12+43	76.0
	*M	LIKE	W068 30.00	12.0W				04:17+11	1107.4
19			N 21 20.00	unk	250T	240	228	00+17+58	74.8
	*M		W069 30.00	11.3W				04:35+09	1182.3
20		HARDEW	N 20 00.36	unk	250T	165	154	00+21+09	88.1
	*M		W068 49.02	11.5W				04:36+18	1270.4
21		IDAHOW	N 19 15.63	unk	290T	135	124	00+16+36	80.2
	*M		W067 38.37	12.0W				05:12+54	1360.6
22		ROBLTW	N 18 57.27	unk	290T	129	117	00+03+16	40.0
	*M		W067 00.84	12.3W				05:24+10	1390.6
23		BEANOM	N 18 45.59	unk	290T	130	117	00+05+14	25.3
	*M		W066 37.17	12.4W				05:26+24	1415.9
24		GOPALW	N 18 38.80	unk	290T	130	117	00+05+06	144.7
	*M		W066 23.40	12.5W				05:29+27	1480.6
25		SJU/R	N 18 26.78	7FT	290T	130	118	00+05+20	25.8
	*M		W065 59.37	12.7W				05:34+47	1456.4

[illegible]

Turn Pt	Type	Fix/Point	Latitude	Elev	Aspd	Altitude	MH	TH	Leg Time	Leg Dist
26	M	GOV/E	N 17 44.97	860 FT	290T	10000M	183	120	00:17+36	83.1
		ST CROX	W064 42 04	12.3W			183	120	05:52:23	1641.4
27	M	TISX/A	N 17 42.09	74 FT	290T	10000M	265	251	00:01+16	6.1
		HENRY E	W064 48 12	13.2W			265	251	05:53:39	1547.6

16.56 / 16.49
17.06 / 16.59

DATE		SCHEDULED RX TIME		AIRCRAFT NUMBER		FLIGHT DIRECTOR <i>Daniels</i>	
WX MISSION IDENTIFIER						OB NUMBER <i>J</i>	
VORTEX DATA MESSAGE							
A	06 / 14 / 15 Z		DATE and TIME of FIX				
B	21 DEG 48 MIN (N) S		LATITUDE of FIX				
	08 16 MIN (W) E		LONGITUDE of FIX				
C	NA MB NA M		MINIMUM HEIGHT of STANDARD LEVEL				
D	85 KT		ESTIMATE of MAXIMUM SURFACE WIND OBSERVED				
E	310 DEG 13 NM		BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND				
F	025 DEG 125 KT		MAXIMUM FLIGHT LEVEL WIND NEAR CENTER				
G	310 DEG 15 NM		BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND				
H	953 MB		MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.				
I	16 C 12413 M		MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE				
J	17 C 12669 M		MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE				
K	16 C NA C		DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE				
L	OPEN W		EYE CHARACTER: Closed wall, poorly defined, open SW, etc.				
M	E35/25/20		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	/ / / NM		NAVIGATION FIX ACCURACY / METEOROLOGICAL ACCURACY				
P	REMARKS						
MAX FL WIND 125 KT NW QUAD 1412Z Z MAX OUTBOUND FL 95 SE QUAD 1418Z WIND EYE OPEN W-SW 60 SFC (61) 1450Z TURBULENT NW QUAD DRY AIR INTRUSION							

INSTRUCTIONS: Items A thru 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 Flight Director's discretion for unscheduled (intermediate) fixes.

N42RF AVAPS DROP LOG

Project : Hurricane '08

Mission: Hurricane Ike **Flight ID:** 08090614

Take Off: 0658L

Landing :

Fit Dir: DAM:AND

Launcher S/N:[illegible]

NESDIS = PED

