85 11
230
-110

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

AOCWF1

Flt ID: 080909H	From: KMLF	To: KMLF
Flt No: 08 – 61	Blk In: 0435Z	ATA: 0428Z
ETD: 2000Z	Blk Out: 1957Z	ATD: 2010Z
ETE:	Blk Time: 8:38 (8.6)	Flt Time: 8:18 (8.3)
Sponsor Org: NESDIS	Program: OCEAN WINDS HURRICANE	Purpose: H. IKE OVER W. CUBA

AOC Personnel

AC: NELSON	Sys Eng:
CP: GIRIMONTE / NEWMAN	Data Sys: ROLES
Nav: GALLAGHER	Radar:
FE: BAST / [redacted]	GPS/BT: BOSKO / GREENE
FD: DAMIANO	Cld Phys:
Avionics: OLNEY	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P	PI	NESDIS
JELENAK, Z	ASST PI	NESDIS
CHU, T	C-SEAT	UMASS
STOFFELEN, A	OBS	
MARKS, F	RADAR	HRD
BLACK, B	RADAR	↓
GOPALAKRISHNAN, S	OBS	
JEPOS, J	MEDIA	CBS RADIO

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

0239Z SAT OVERPASS
22°57' 83°45' 2158Z 968 EXTP
23°05' 84°03' 0021Z 967mb extp
AF 22°53' 83°42' 2115Z
23°03' 83°55' TEAL 73 21Z 0030Z 2326Z 968 EXTR
23°04 84°06 0049Z 968 EXTP
0002 23.2N 84.2W NOAA2 1609A IKE
23°06' 84°08' 0115Z 967 EXT
967 23°06' 84°11' 0144Z
NHC 15Z 22.6N 83.0W
290/11 295/10 22.7N 83.4W
2245' 8°20'

OVER →

U.S. Dept. of Commerce / NOAA / Aircraft Operations Center
AOCWF2

Flt ID: 080909H	Time Off: 2000Z	Time On: 0428Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1009.9	29.84 1010.7 1010.2	1012.0	29.42 1013.0 1012.5

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT All Chs 12	7	6 good; 1 bad
AXCP		
AXCTD		
Dropsondes	20	12 NESDIS; 4 HRD; 1 NHC; 3 AOC
PROT	3	

Video

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

Remarks

~~1857Z~~
~~33~~
24
~~29.86~~
1955Z
33
24
29.84

967 extrap
968 Sonde
23°11' 84°19'
0305Z
23°10' 84°17'
0246Z
967 EXT

N42RF ERROR SUMMARY
H. IKE OVER WESTERN CUBA

Flight ID: 080909H

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

Notes:

There were no data gaps. 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. INE1was selected since it best corresponded with the analog output.

There were no liquid water sensors available for the flight.

The APN-159 (RA159X) was inop for the entire flight. The blended GPS altitude from INE1 (ALTI1) was used.

Measured dewpoint temperature #2 (EdgeTech)...TDM2...exhibited a couple of time periods of erroneous data during the flight. For 014446Z – 014522Z the erroneous data was removed by substituting TDM3(Maycomm/TDL) output,

TDM2 = TDM3

For 203914Z – 203926Z the erroneous TDM2 data was removed and replaced using statistical techniques.
For 000472Z – 000536Z the erroneous TDM2 data was removed by substituting

TDM1(Buck) output,

TDM2 = TDM1

All other instruments worked optimally during the flight.

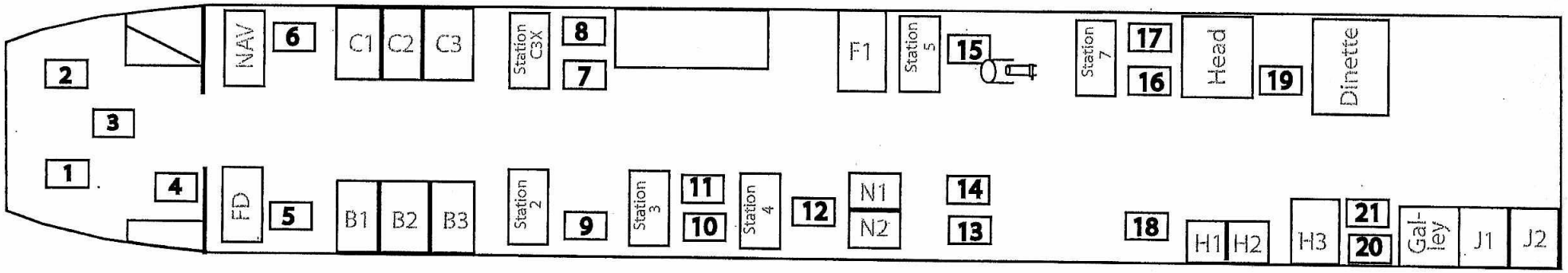
Twenty (20) GPS dropsondes were deployed with all being good. Twenty (20) tempdrop messages were sent to NHC. Also three (3) prototype dropsondes were deployed. Seven (7) AXBTs were deployed with six (6) being good.

	Takeoff 2010Z	**Landing 0428Z**
Aircraft Static Pressure	1009.9mb	1012.0mb
Corrected Tower Pressure	1010.2mb	1012.5mb

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

NOAA AIRCRAFT OPERATIONS CENTER

Flight ID 080907H



1. NEWMAN — PILOT
2. NELSON — COPILOT
3. [redacted] BAST — FLIGHT ENGINEER
4. CHANG — STATION 1
5. DAMIANO — FLIGHT DIRECTOR
6. GALLAGHER — NAVIGATOR
7. KLIPPEL — STATION C3X
8. GIRIMONTE — STATION C3X
9. STOFFELEN — STATION 2
10. — STATION 3
11. GREENE — STATION 3
12. ROLES — STATION 4
13. — PROJECT SEAT
14. BOSKO — PROJECT SEAT
15. OLNEY — STATION 5
16. JELENAK — STATION 7
17. CHU — STATION 7
18. DARBY — STATION 8
19. — DINETTE
20. — GALLEY
21. — GALLEY

DATE	SCHEDULED RX TIME	AIRCRAFT NUMBER	FLIGHT DIRECTOR

WX MISSION IDENTIFIER	OB NUMBER
	22

VORTEX DATA MESSAGE

A	10 / 0305 Z	DATE and TIME of FIX
B	23 DEG 11 MIN (N) S	LATITUDE of FIX
	84 DEG 19 MIN (W) E	LONGITUDE of FIX
C	700 MB 2824 M	MINIMUM HEIGHT of STANDARD LEVEL
D	70 KT	ESTIMATE of MAXIMUM SURFACE WIND OBSERVED
E	293 DEG 07 NM	BEARING and RANGE FROM CENTER of MAXIMUM SURFACE WIND
F	022 DEG 67 KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER
G	295 DEG 09 NM	BEARING and RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND
H	968 MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM FLIGHT LEVEL. IF EXTRAPOLATED, CLARIFY IN REMARKS.
I	16 C / 2512 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE OUTSIDE EYE
J	17 C / 2630 M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE ALTITUDE INSIDE EYE
K	17 C / NA C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE
L	CLOSED WALL	EYE CHARACTER: Closed wall, poorly defined, open SW, etc.
M	C10	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 67 KT NW QUAD 0303 Z

RADAR EYE APPEARS RAGGED

MAX OUTBOUND FL WIND 66 KTS NQUAD 0308Z

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.

NOAA • AOC • SED
N42RF AVAPS DROP LOG

Project : Hurricane '08 **Mission :** Hurricane Ike **Flight ID :** 080909

2008Z

Take Off : 1608L **Landing :** | **Flt Dir :** Damiano **Launcher S/N:** ______

Center fix

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Charge $$ To	Comments	Good ?
1	062339091	1	-.4	2107	5	JB	EMC	free fall	✓
2	062949002	2	-.4	2124	5		EMC	freefall	✓
3	061329091	3	-.4	2156	5		NESDIS		✓
4	062249122	~~4~~	-.4	2230	6		EMC		✓
5	062339071	1	0	2303	5		EMC		✓
6	062249228	2	-.5	2323	3		NESDIS		✓
~~7~~	~~062339062~~	~~3~~							
Center 7	063019128	4	-.5	2326	3		EMC		✓
8	062339062	3	-.5	2328	3		NESDIS		✓
9	063019099	2	-.3	2340	3		EMC		✓
Prototype 9A	064916012	1(S)	—	2340		Proto 1	AOC	No vert SPD	
10	063019101	2	-.5	2356	3		EMC		✓
11	062249074	3	0	0018	3		NESDIS		✓
12	062339014	4	0	0023	2		NESDIS		✓
13	062249118	1	-.6	0052	3		NESDIS		✓
14	062439026	2	0	0119	5		NESDIS		✓
15	062339119	3	-.3	0134	3		EMC		✓
16	062439010	4	-.3	0150	2		NESDIS		✓
17	062249105	1	0	0201	3		EMC		✓
Prototype 17A	064916115	1(S)	0	0201		Proto 2	AOC	BAD PTH	✓
18	063019126	2	0	0239	3	JB	NESDIS		✓
19	062249153	1	-.4	0251			AOC		✓
Proto 19A	075043285	1(S)	0	0251			EMC	NO PTH	
20	062249116	1	-.4	0304	5		EMC		✓
	06[illegible]		-.6						

Margin notes: 9/9A — Launched together; 2249 8352. 17/17A — Together. 19/19A — Together. 32

2303 8315

2304 8406

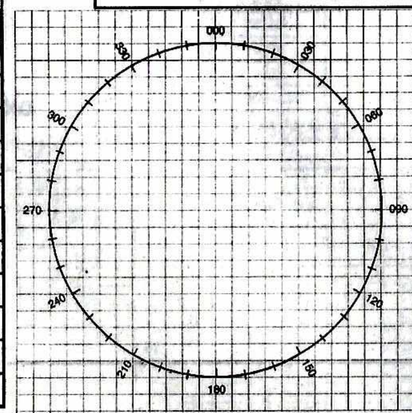
22 53 N 83 42 W

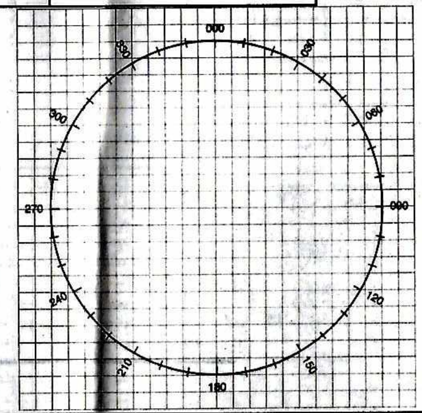
2457   2302   0842 2334   0239   132.2

MISSION LOG

PAGE ___ OF ___

CLEARANCES			
FREQ	ALT	HDG	OTHER





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 ______, 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 ______ SOULS ON BOARD
- NATURE OF EMERGENCY
- ASSISTANCE DESIRED
- PILOT INTENTIONS
- WE HAVE ______ ENDURANCE REMAINING 3647

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
1935 1951	ENG TAXI																				
1951 2010	BLK T/OFF																				
2015	A	22-45.4 082-26.2	22-45.4 082-26.2	— —	22-45.4 082-26.2	— —	241	5W	236	4R	240	249	109	34	12000	226	Cigar	124	+27	2042	
2115	A	24-32.3 085-40.5	24-32.5 085-40.5	-.6	24-31.7 085-40.5	+.6	128	2W	126	10R	136	235	048	45	8000	240	11G	105	+25	2140	
2158	⟳	22-56 081-45																			
2215	A	21-59.0 082-38.7	22-00.0 082-38.9	-1.0 .2	21-59.8 082-38.8	-.4 -.1	147	3W	144	11R	130	230	215	54	8000	242	4	32	+08	2223	
2315	A	23-22.6 083-32.9	23-24.2 083-32.3	+1.6 -.6	23-22.6 083-32.6	— +.3	217	3W	214	10R	224	242	133	48	8000	248	11G	45	+11	2226	
2326	⟳	23-02.443 083-55.709																			
10 0015	A	22-40.6 084-20.1	22-43.0 084-19.9	-2.4 +.2	22-40.4 084-19.5	+.2 +.6	039	3W	036	8L	044	246	305	40	8000	245	11G	26	+06	0021	
0021	⟳	23-04.842 084-02.771																			
0115	A	23-08.6 084-08.8	23-12.6 084-08.7	-4.0 +.1	23-09.3 084-08.9	-.7 -.1	282	2W	280	16L	270	258	019	40	8000	247	11G	10	+02	0117	
0116	⟳	23-06.0 084-08																			
0144	⟳	23 06.010 084 10.556																			
0210	A	23-35.0 085-35.5	23-40.5 085-34.3	-5.5 +1.2	023-36.3 085-35.9	-1.3 -.4	097	2W	095	8R	107	235	022	56	8000	250	0245	32	+07	0247	
0246	⟳	23-09.568 084-16.179																			
0304	⟳	23-10.718 084-19.274																			

0043   2314 8427

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
0315	A	24-13.1 084-16.2	24-18.7 084-13.8	-5.6 +2.4	24-13.7 084-15.3	-.6 +.9	017	3W	014	14	000	251	101	55	8000	248	14	45	+01	0316	
0420	LAS	27-30.7 082-29.6	27-35.0 082-26.2	-6.1 +3.9	27-32.2 082-28.7	-1.3 +.9															
0435	BLK			027/ 7.71		036/ 1.49															