



N42RF ERROR SUMMARY

H. GUSTAV IN WESTERN CARIBBEAN



Flight ID: 080829H

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

Notes:

There were no data gaps. However beginning with this 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 displayed numerous time periods of erroneous values. The RA159 data glitches were fixed using statistical techniques during the following time periods: 211600Z – 211800Z, 215200Z – 215400Z, 220100Z – 220300Z, 220400Z – 220600Z, 221000Z – 221200Z, 222500Z – 222700Z, 224300Z – 224500Z, 225200Z – 225400Z, 230100Z – 230300Z, 230400Z – 230600Z, 233500Z – 233700Z, 233800Z – 234000Z, 234400Z – 234600Z, 003800Z – 004000Z, and 014500Z - 014700Z.

For the time period 022441Z – 022531Z the RA159 output was removed and directly replaced with output from inertial #1's (INE1) blended GPS altitude (ALTI1),
RA159 = ALTI1.

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AOCWFI

Flt ID: 080829H	From: KMCF	To: KMCF
Flt No: 08-056	Blk In: 0418z	ATA: 0410z
ETD: 2000z	Blk Out: 2006z	ATD: 2019z
ETE:	Blk Time: 8:12 (8.2)	Flt Time: 7:51 (7.9)
Sponsor Org: NESDIS	Program: OCEAN WINDS PED HURRICANE	Purpose: GUSTAV IN W. CARIBBEAN

AOC Personnel

AC: CITOY ✓	Sys Eng:
CP: GIRIMONTE ✓ TAGGART ✓	Data Sys: PEEK ✓
Nav: STEGEL ✓	Radar:
FE: BAST/WADE ✓	GPS/BT: BOSKO ✓ GREENE ✓
FD: DAMIANO ✓	Cld Phys:
Avionics: OLNBY ✓	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
GAMACHE ✓	PI	HRID
LORSOLO, S ✓	ASST PI	↓
ANNANE, B ✓	OBS	
JELENAK, Z ✓	C-SCAT	NESDIS
CHU, T ✓	C-SCAT	UMASS
MANUS, J ✓	C-SCAT	UMASS
CARSEY, T	OBS	

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #) 30

IP 2034 8120 1804 ② TEAL 72 2330z 1207A GUSTAV

① 7842 2012 put under in sector mode

2034 ② 7841 ① 1806 8118

NO JLV

BT at endpts if we get Cuban overflight chr

using RH159

60° wedge

4 penetrations

drop in inbound leg for ASDC not working until Bolly swapped ASDC units

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AOCWF2

Flt ID: 080829H Time Off: 2019Z Time On: 04/02

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1009.9	29.843 ^{1010.4} 1009.9	1011.3	29.82 ^{1012.3} 1011.8

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes		
AXBT	17	2 remaining in fuselage; 15 good
AXCP		
AXCTD		
Dropsondes	15	70 feet falls; 4 OBS sent to NHC 10 NESDIS; 4 EMC

Video

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

Remarks 755

33
24

2243Z 973 mb
1905'
7950'

0001Z 976 mb
1913'
7958'

0050Z 974 mb
1915'
8006'

0146Z 974 mb
1919'
8013'

2.7
2.7
2.8

8/10

2119Z
29.78 mb1911Z
1000 7924

29.83

Measured dewpoint temperature #2 (EdgeTech)...TDM2...exhibited several time periods of erroneous data during the flight. During the following time frames:
210306Z – 210352Z, 211601Z – 211622Z, 211705Z – 211713Z, 212252Z – 212300Z,
212853Z – 212906Z, 214912Z – 215821Z, 220601Z – 220610Z, 000248Z - 000505Z and
003420Z – 003427Z the erroneous data was removed by substituting
TDM3(Maycomm/TDL) output,

TDM2 = TDM3

The x-direction groundspeed output from inertial #1 (GSUI1) spiked from
014700Z – 014900Z. The spike was removed and patched using statistical techniques.

All other instruments worked optimally during the flight.

Fifteen (15) GPS dropsondes were deployed with 8 being good and 7 being fastfalls. Four
(4) tempdrop messages were sent to NHC.

Fifteen (15) AXBTs were deployed all being good.

	Takeoff 2019Z	Landing 0410Z
Aircraft Static Pressure	1009.9mb	1011.3mb
Corrected Tower Pressure	1009.9mb	1011.8mb

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

Gannah

✓

2034

Alexson
basolo
amane

Carney

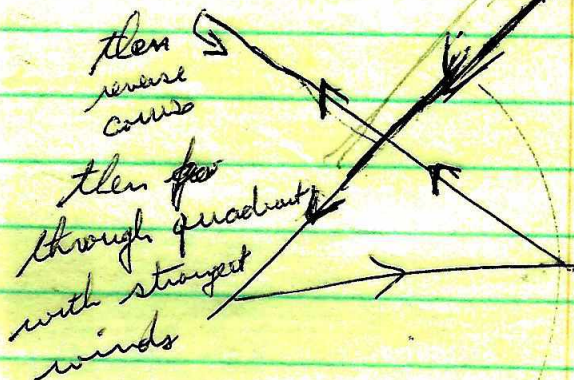
8120

Tao, Joe

Ask about wedge

7K RA at all possible

75 mm shorten as
necessary



drop over/in
eyewall

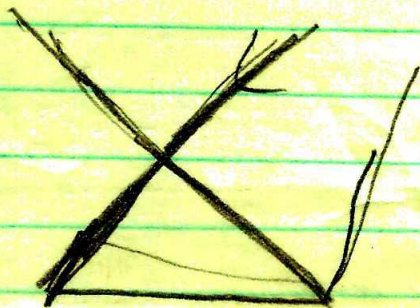
no endpt > 40 kts
drops for NESDUS

drop
every other leg

reverse course on same track
in straight winds
quad

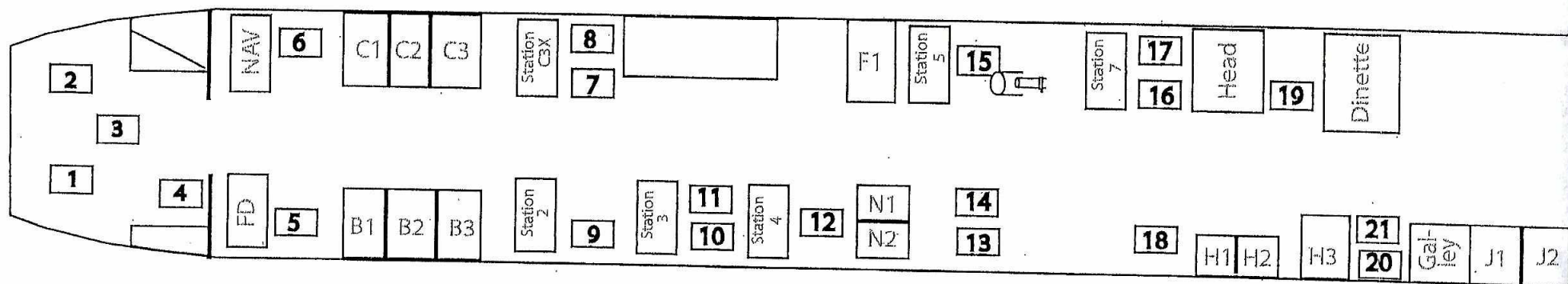
1920' 8000

295/07



NOAA AIRCRAFT OPERATIONS CENTER

Flight ID 08082914



1. CHOY
PILOT

2. GIRIMONTE
COPILOT

3. WADE
FLIGHT ENGINEER

4. JELENAK
STATION 1

5. DAMIANO
FLIGHT DIRECTOR

6. SIEGEL
NAVIGATOR

7. ANNANE
STATION C3X

8. TAGGART
STATION C3X

9. CARSEY
STATION 2

10. GAMACHE
STATION 3

11. LORSOLO
STATION 3

12. PEEK
STATION 4

13. GREENE
PROJECT SEAT

14.
PROJECT SEAT

15. BOSKO
STATION 5

16. CHU
STATION 7

17. McMANUS
STATION 7

18. OLNEY
STATION 8

19. BAST
DINETTE

20.
GALLEY

21.
GALLEY

**NOAA • AOC • SED
N42RF AVAPS DROP LOG**

Project : Hurricane '08

Mission : TSU GUSTAV Flight ID : 080829H

Take Off : 1617L Landing : Flt Dir : Dominica Launcher S/N : 10

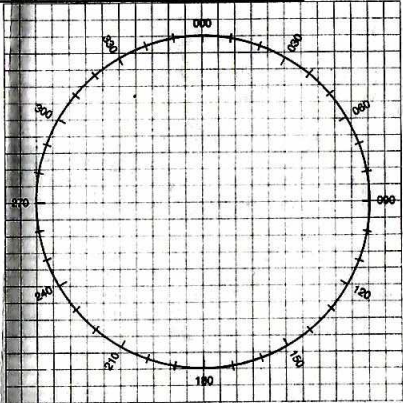
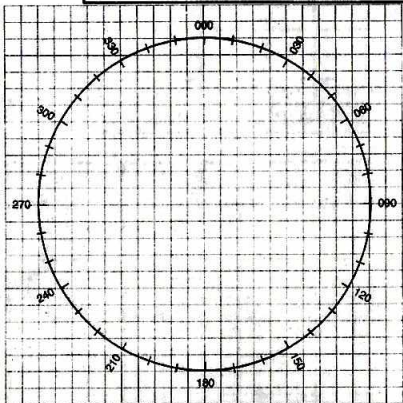
Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Charge \$S To	Comments	Good ?
1	061529186	1	-5	2215	2	JB	EMC	NO LAUNCH DETECT	X
2	062049303	2	0	2232	—		NES	FAST FALL	
3	061529130	3	0	2234	—		NES	FAST FALL	
4	061529008	4	0	2248	12		NES		X
5	0615119007	1	-5	2310	2		EMC		X
6	062049144	2	0	2337	12		EMC		X
7	061329224	3	-7	2357	—		NES	FAST FALL	
8	062049242	2	-14	2357	—		NES	FAST FALL	
9	061329216	1	-5	0012	6	WRD	NES		✓
10	060416016	2	-4	0027	6		EMC		✓
11	062049248	1	-5	0102	—		NES	FAST FALL	
12	061339127	2	-5	0103	—		NES	FAST FALL	
13	062049222	3	-16	0110	—		NES	FAST FALL	
14	061329227	4	-3	0134	10		NES		✓
15	061339125	1	-4	0200	6		NES		
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

EMC = NWS

CLEARANCES			
FREQ	ALT	HDG	OTHER
			123.7
			133.7

MISSION LOG

PAGE ____ OF ____



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 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 8364 KHZ MF/CW 500 KHZ

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA _____, NOAA _____, NOAA 42

- POSITION _____ N 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	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
2000	START																				
2000	TAXI																				
2000	BLK																				
2009	170																				
2027	X✓	N 27 41.3 W 082 33.8	27 41.3 82 33.9	-0 -1	27 41.3 82 33.8	-0 -3	240	4W	236	1L	235	254	064	9	170	246	EW				187/11
2115	△	27 41.3 81 07.9	27 41.3 81 07.8		27 41.3 81 07.8		152	4W	148	UR	152	257	064	11	170	253	NA				
2215	△	20 19.6 81 07.9	20 20.2 81 07.6	+1.0 +3	20 19.8 81 07.2	-1.2 +1.7	130	4W	126	10R	136	231	056	30	070	234	EYE				
2315	△	18 34.7 78 30.2	18 35.9 78 30.1	+1.2 +1.9	18 35.3 78 30.4	-0.6 +0.2	005	SW	002	2R	002	285	186	48	070	231	NE				
0015	△	18 41.8 80 38.5	18 42.5 80 38.1	-0.7 +1.4	18 42.3 80 38.0	-0.5 +1.5	252	4W	248	12L	236	240	332	51	070	239	SW				
0117	△	19 45.8 79 18.4	19 47.0 79 18.5	+1.2 +0.9	19 46.5 79 18.5	-0.5 +0.9	225	SW	222	15R	237	235	130	80	070	234	OVZ				
0225	△	20 48.1 80 04.7	20 50.5 80 03.0	-2.4 +1.7	20 50.4 80 03.1	-2.3 +1.6	310	SW	305	5L	300	291	040	57	070	234	UCL				
0320	△	24 18.6 81 43.7	24 21.0 81 42.9	-2.4 +0.8	24 20.6 81 42.6	-2.0 +0.3	358	4W	341	4L	350	295	068	26	150	295	MCF				
0410	UWD	27 51.0 82 31.3	27 54.1 82 30.1	-3.1 +1.2	27 53.2 82 29.3	-2.2 +1.0															
0418	BLK																				

✓

K station

✓