



NOAA G-IV ERROR SUMMARY

SALEX 2006

H HELENE FLT #3



Flight ID: N060918

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	VEW, VNS
Accelerometer	ACINS
Temperature Probe	AT3
Dew Point Probe	DPRC
Static Pressure	PS2C
Dynamic Pressure	QC2C
Attack Angle	AKRD1
Slip Angle	SSRD1
Vert. Wind	PALT
Constants File	49cal061
Project Directory	/proj/605

Local surface observation not current or unavailable.

Notes:

There was one data gap: 160141Z - 160204Z.

The Total Temperature #2 (TT2) probe was not available for this mission.

Static Pressure #1...PS1M...had several stair-step occurrences and was not used for meteorological derivations.

Dynamic and differential slip pressure #2...DBP2/BP2...had erroneous output from 163239Z – 210855Z and was not used for meteorological derivations.

RA232 radar altimeter was not working for the entire mission.

Vertical wind values may be erroneous near the immediate vicinity of the aforementioned data gap.

All other instruments worked optimally during the flight.

	Takeoff	Landing
Aircraft Static Pressure	1009.3mb	1007.3mb
Corrected Tower Pressure	1010.0mb	NA

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

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

AOCWF

Flt ID: N060918	From: TBPB	To: TBPB
Flt No: 06-106	Blk In: 2129Z	ATA: 2127Z
ETD: 1500Z	Blk Out: 1443Z	ATD: 1451Z
ETE:	Blk Time: 6:46 (6.8)	Flt Time: 6:36 (6.6)
Sponsor Org: HRD	Program: SALEX	Purpose: FLT #3 H. HELENE WITH N42RF

AOC Personnel

AC: FINN	Sys Eng: HILL
CP: ODELL / LONGENECKER	Data Sys: ROGERS
Nav:	Radar:
FE:	GPS/BT: PEEK
FD: DAMIANO	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
BLACK, M	PI	HRD
BLACK, P	ASST. PI	HRD

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #) **RA232 erroneous from 1/6 provide MADS highlight 1600Z**
Look at drop #1 for A/c comparison
DBP2/BR2 out 1720Z
came back 2100Z during descent to Barbados

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

AOCWF2

Flt ID: *N060918* Time Off: *1451Z* Time On: *2127Z*

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

*1009.3**1015**1007.3*

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

1

Radar Tapes

Cloud Physics Tapes

Video Tapes

AXBT

AXCP

AXCTD

Dropsondes

*27**26 good ; 1 bad ; all HRD**26 messages sent*

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

212 1700Z

N49RF AVAPS DropSonde Log

Project: SACEX Flight ID: 060918N Flt Dir: DAMIANO
 Mission: HELENE Flight #: 14 Status: Sys 1 Sys 2 Launcher S/N: 002

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments /Status/ Failure Reason	\$	GOOD ☒
1	030 725 440	1	1512	-4	59	DGP			✓
2	034 555 040	3	1532	-2.6	29				✓
3	013 215 174	1	1543	Ø	18		SPORATIC LOSS OF		X
4	034135 094	3	1556	-5.1	15				✓
5	000 715 028	4	1613	0	25		GPS LOST 400-500mb		X
6	000 715 157	1	1629	Ø	49				✓
7	034135 096	3	1638	+4.7	12				✓
8	034325 122	4	1655	-2.2	23				✓
9	000 715 124	1	1708	Ø	48		WINDS TEL		X
10	013 215 178	3	1714	Ø	1:23		WINDS FAST		X
11	013 945 162	4	1721	Ø	30				✓
12	000 715 030	2	1735	Ø	35				✓
13	013 215 058	3	1742	Ø	55				✓
14	013 978 130	1	1756	Ø	19		TEL		✓
15	013 978 131	4	1827	Ø	30				✓
16	013 945 160	1	1835	-0.3	11				✓
17	013 945 161	3	1843	Ø	47		TEL		✓
18	013 635 090	4	1851	-0.4	53				✓
19	013 945 192	2	1859	Ø	45				✓
20	013 215 165	1	1915	-0.3	47		GPS @ 650mb		✓
21	013 248 116	3	1923	Ø	35				✓
22	013 968 048	4	1931	Ø	29		TEL GPS		✓
23	013 515 025	1	1946	Ø	45				✓
24	013 978 133	3	2001	Ø	42				✓
25	013 635 022	4	2007	Ø	56		BACKUP		✓
26	013 215 167	2	2016	-0.4	33		GET FROM LS		✓
27	013 635 009	1	2031	Ø	28				✓
28	000 715 018	2							
29	013 635 046								
30									
31									
32									
33									

\$ Codes A = AOC N = NHC/NWS H = HRD OW = NESDIS _____ = _____ = _____

ALL SONDES DONATED BY 53RD WPS

- ~~(1) 15.0 58.2~~
- ~~(2) 17.0 57.0 (WP1)~~
- ~~(3) 18.5 57.0~~
- ~~(4) 20.0 57.0 (WP2)~~
- ~~(5) 22.0 57.8~~
- ~~(6) 24.0 58.1~~
- ~~(7) 25.0 58.2~~
- ~~(8) 27.0 59.0 (WP3)~~
- ~~(9) 27.0 57.0~~
- ~~(10) 27.0 56.0~~
- ~~(11) 27.0 55.0~~
- ~~(12) 27.0 53.0~~
- ~~(13) 27.0 52.0~~
- ~~(14) 27.0 50.0 (WP4)~~

~~(15)~~

WP 4-5 → mid x 1
 WP 5-6 mid x 2
 WP 7-8 mid x 1
 WP 8-9 mid x 3
 WP 9-10 mid x 2

23 sondes

~~27 46.5~~

WP 5	25	46.5
WP 6	22	46.5
WP 7	20	47
WP 8	18	48
WP 9	18	52
WP 10	18	56

24
23

25
30

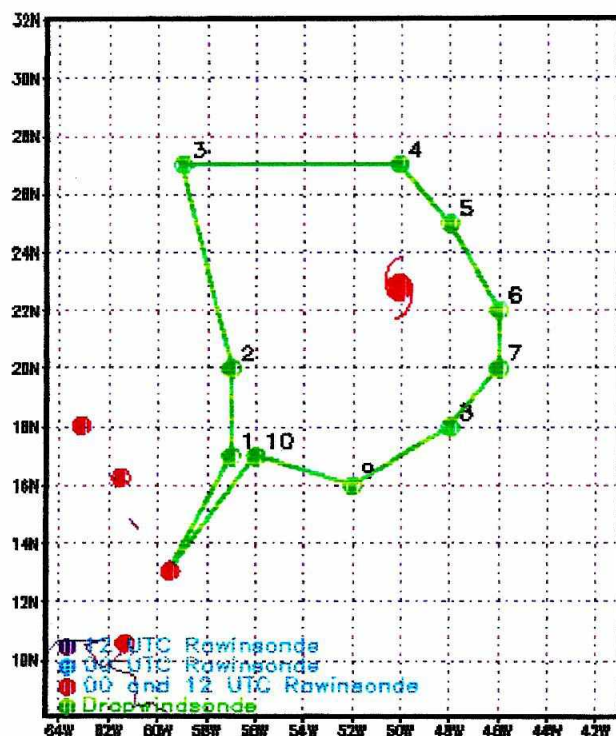
65 KTS
 23 29
 50 16
 966 m/s

From
WP 2 & 3

16192

24 Dec 23

54



GADS: COLY/IES

2006-09-18-06:10

===== HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: SALEX =====

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 18/1500Z
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TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	BARBADOS			0.	0.	0:00
1	17 00	57 00		277.	277.	0:48
2	20 00	57 00		180.	458.	1:12
3	27 00	59 00		435.	893.	2:11
4	27 00	50 06		477.	1369.	3:16
5	25 00	48 00		165.	1535.	3:38
6	22 00	46 00		211.	1746.	4:07
7	20 00	46 00		120.	1866.	4:23
8	18 00	48 00		165.	2032.	4:46
9	16 00	52 00		259.	2291.	5:21
10	17 00	56 00		238.	2529.	5:53
11	BARBADOS			312.	2841.	6:46