

Flt ID: 020930H	From: KMCF	To: KMCF
Flt No: 02-85	Blk In: 2346	ATA: 2335
ETD: 1600Z	Blk Out: 1557	ATD: 1616
ETE: 8+30	Blk Time: 7.8	Flt Time: 7.3
Sponsor Org: NOAA / NESDIS	Program: OCEAN WINDS	Purpose: Hurricane Lili

AOC Personnel

AC: TAGGART, B	Sys Eng: DELGADO, J ✓
CP: KENUL, P / SILAH, M ✓	Data Sys: MC Millan, S ✓
Nav: NEWMAN, C ✓	Radar:
FE: BAST, G / WADE, S ✓	GPS/BT: PEEK, B ✓
FD: SHEPHERD, T ✓	Cld Phys:
Avionics: ROGERS, M ✓	

Radio and Sensor / Video AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P ✓	PI	NESDIS
	SFMR / IWRAP	
ZHANG, A ✓	↓	U MASS
ESTEBAN, D ✓	↓	
LEIGHTON, P ✓	HAPS / RADAR	HRD
ABERSON, S ✓		

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

TEAL 74 1730 off station 19.6 19.6 987E 60KT
 TEAL 75 2330 ON STATION

2335
 1616
 719

22 106
 15 57
 7.49

PENET 1-1818
 2-1836
 3-1900
 4-1920
 5-2010

1957 1750
 8017
 290/8
 6-2057
 7-2125
 8-2150

1935
 8000
 2017
 7930

1300
 180
 1120

Flt ID:	070930H	Time Off:	1616	Time On:	2335
	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)	
Pressure	1016.6	30.03	1013.8	29.97	
	Number	Data Disposition / Date / Quality			
Flt Lvl Tapes					
Radar Tapes					
Cloud Physics Tapes					
Video Tapes					
AXBT	10	2 bad			
AXCP					
AXCTD					
Dropsondes	14	All good - 1 slow launch Detect 6 HRD / 8 NEBD's			

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

Remarks



NOAA P-3 N42RF

Ocean Winds 2002

H. Lili



Flight ID: H020930

Sensor or system

INE
Accelerometer
Temperature Probe
Dew Point Probe
Altitude (for vertical wind)
Static Pressure
Dynamic Pressure
Time Source
Constants File

Number or Name

2
2
1
3 (Buck Research)
Radar Altitude (RA-232)
Rosemount Fuselage
Rosemount Fuselage
Micro 99
CO2023.CON

Take off: 1616Z

Land: 2335Z

Notes:

There was a time gap 174401 - 174410.

The RA-159 Radar Altimeter had multiple dropouts (12) between 203430 and 211120.

All other instruments worked optimally during the flight; however, there were multiple times when the dewpoint temperature exceeded ambient temperature resulting in an RH >100%. These times were during heavy rain events (as noted by the Johnson-Williams Liquid Water sensor) and were likely due to a wet-bulb effect on the total temperature sensor and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. No corrections were made during these events.

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!!

Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft Static Pressure	1016.6 mb	1013.8 mb
Corrected Tower Pressure	1016.9 mb	1014.9 mb

Flight Director:
Phone #:

Tom Shepherd
(813) 828-3310 ext. 3053

Flight ID: 020930H

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

Form 413-50

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
171020	2421	8118	165	160	074	28.9	1.7	-16.1	4579	4832	1009.2	571.9	76.2	Set Bco
174510	2214	8029	130	127	92	28.5	0.7	0.0	4572	4771	1004.1	571.8	65.2	over Cuba
180422	2057	8019	185	177	101	38.7	15.6	13.4	2079	2108	1003.6	787.7	76.7	D1 B1
180517	2053	8020												D2
181825	2004	8018												D3 B2
182245	1952	8008	132	148	214	60.0	15.0	16.1	2150	2120	995.9	780.5	72.4	D4 B3
183415	1957	8006												D5 NES
183546	2001	8011												D6 NES
184250	2001	8011												D7 NES
184423	1959	8006												D8 NES
184517	1958	8003												D9 NES
184630	1956	7958	115	130	204	59.9	14.6	15.6	2136	2131	997.6	781.5	79.7	
185908	2005	8013												D10 NES
190715	2014	8013	035	051	140	62.2	15.7	15.4	2160	2120	994.0	780.6	80.0	D11 NES
193450	2014	8123	282	289	17	23.7	15.6	15.0	2096	2125	1002.7	785.6	78.6	D12 B4
194920	2020	8211	110	107	013	21.8	15.0	15.2	2069	2120	1004.7	786.6	62.9	
202125	2013	7955	611	018	176	56.7	14.5	15.3	2121	2135	1000.8	781.6	72.8	Just came over EAST side
204345	2059	8104	160	150	076	49.5	14.9	15.2	2104	2123	1001.6	781.8	66.7	Turn to follow M13 to ENTR
213625	2015	8024												D13 B5 NES
213102	2014	8021												D14
213255	2014	8014	97	111	187	54.9	15.3	17.0	2126	2116	997.5	782.0	73.1	in cloud
214704	2011	8037												B6
215055	2019	8047	043	040	345	16.7	17.8	18.2	2254	2112	978.8	770.0	80.9	B7
215425	2030	8036												D15 B8 NES
220235	2058	8021	353	002	136	54.4	14.3	15.2	2126	2148	1002.1	782.5	80.0	B9
220955	2131	8025	002	013	118	41.0	14.7	12.0	2131	2203	1006.2	776.4	75.2	B10
221125	2136	8024												END SFC CLIMB PT B
225440	2502	8129	356	002	087	29.2	-5.9	-20.6	5795	6143	1008.4	485.3	83.3	FL 190 BKU BLD
232640	2730	8223	314	319	069	23.1	14.8	12.3	1910↓	1992↓	1013.5	809.6↑	72.8	Descending KMCF

25 8115
180

215

Flight ID: 020930H

Takeoff: 1616

H. Lili

TT # 1

Land: 2335

TD # 3

INE # 2

AZI # 2

Altimeter 232

Time gap 174401-174410

RA159 - several dropouts (13)
between 203430 and 211120

Renav (OVER)

1) 165800	0.1	0.2	2516.3	8131.0 ✓
174700	-0.6	0.6	22 8.5	80 23.9 ✓
183600	-1.5	0.8	20 2.2	80 12.1 ✓
192400	-2.2	1.2	20 4.8	80 36.0 ✓
5) 195500	-2.5	1.1	20 12.3	81 49.4 ✓
203600	-3.1	1.4	20 53.9	80 27.5 ✓
212400	-3.7	1.5	20 22.6	80 50.2 ✓
220100	-3.6	2.0	20 49.5	80 19.7 ✓
224500	-3.9	2.2	24 14.2	81 19.7 ✓
10) 222600	-3.6	2.6	27 28.0	82 20.7 ✓
11) 233800	-3.2	3.0	27 51.6	82 30.5 ✓

N42RF AVAPS DropSonde Log

N42RF Project: Hurr 02

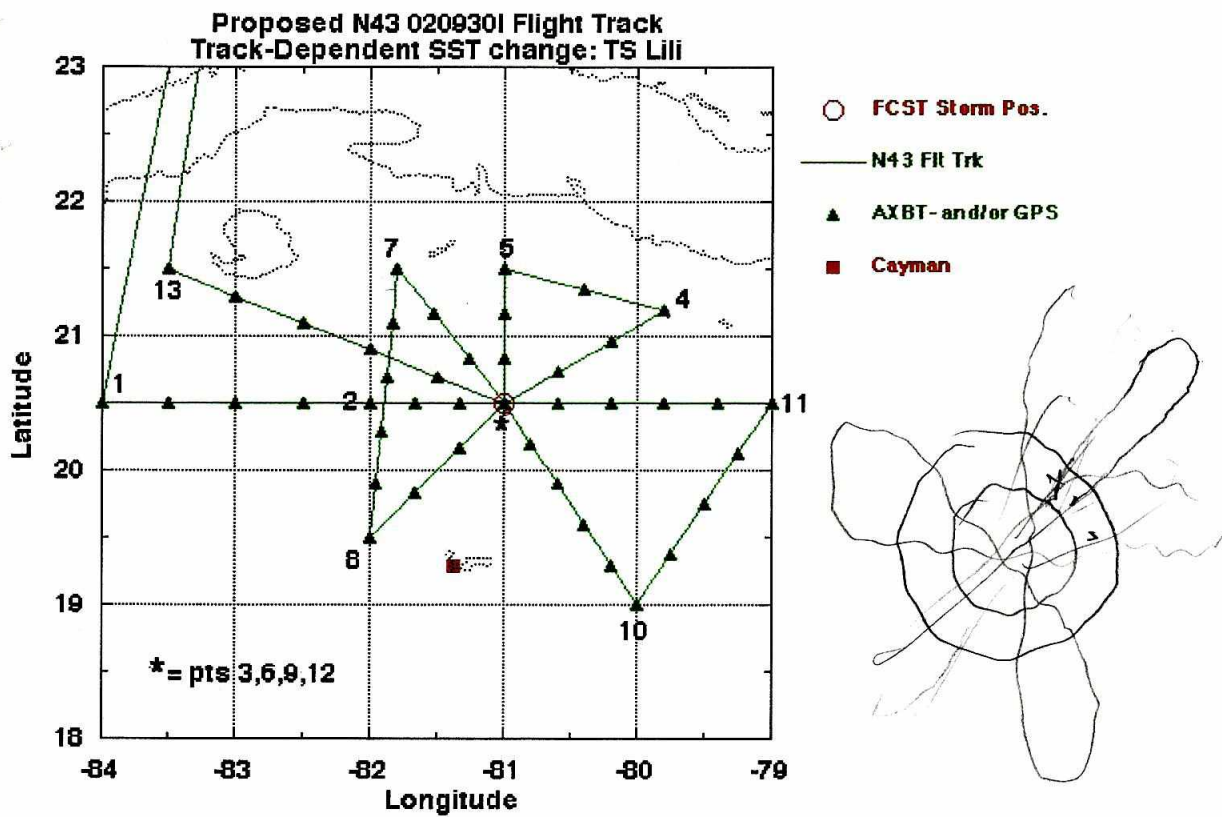
Flight ID 020930H

Mission: LIL

Flight #: _____

System Status: _____

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD ☒
1	013 635 077	1	1804	+4	40	MER	BT CH 16 LATE L.D.	
2	013 945 051	2	1805	0	40			
3	013 635 075	3	1818	-1.9	70		BT CH 12	
4	013 635 271	4	1822	+3	50		BT CH 16	
5	013 635 217	1	1834	+2	28			
6	013 515 082	2	1836	0	82			
7	013 635 233	3	1842	+2	30			
8	013 635 268	4	1844	0	-			
9	013 635 267	1	1845	+2	-			
10	013 715 023	2	1859	+2	15		NO WINDS INT	
11	013 715 049	3	1907	+3	13			
12	013 978 149	4	1934	+2	44		BT CH 12	
13	013 635 263	1	2130	+4	-		BT CH 16 < BT BAD	
	013 635 268	2	2131	+1	-			
	013 715 045	3	2154	+2	44		BT CH 12	
16	013 715 024	4		0				
17	013 635 265	1		+3				
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
	BT CH 12		2147					
33	BT CH 16		2151					
	BT CH 12		2202					
	BT CH 16		2209					



HURRICANE RESEARCH DIVISION MISSION PLAN: LILI/Trk-Dep SST :56:54 AM
Aircraft: N43RF Altitude 5,000 ft if AXCP, 10,000 ft if only AXBT
Proposed takeoff: 30/1700Z

TRACK DISTANCES

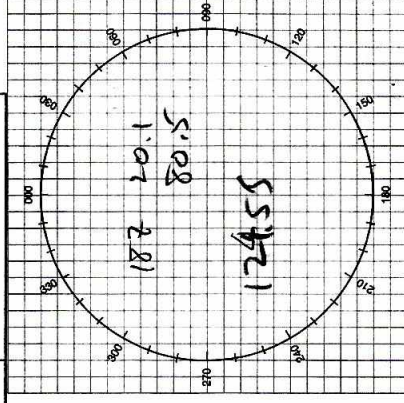
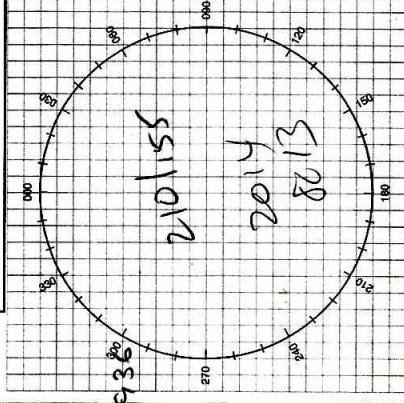
LAT LON RAD/AZM LEG TOTAL TIME
(d m) (d m) (nm/dg) (nm) (nm) (h:mm)

0 MACDILL 0. 0. 0:00
1 20 30 84 00 449. 449. 1:52
2 20 30 82 00 116. 565. 2:21

[illegible]

FRQ	ALT	HDG	OTHER
1958			mcf RSW MTH
80			TADPO UNA
1952			J3 UCF 1936 DT
80			ACT 1855EN ACT
80			UCF OCT MTH
20.06			ACT RSW OCT PIE
80.32			OCT KMCF
80.32			(DT) (600)
80.32			140 170

MISSION LOG	PAGE ____ OF ____
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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	3364 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

[illegible]