

Flt ID: IO11006	From: MMBT	To: MMBT
Flt No.: 02-04	Blk In: 2310Z	ATA: 2304Z
ETD: 1530Z	Blk Out: 1534Z	ATD: 1540Z
ETE:	Blk Time: 7:36 (7.6)	Flt Time: 7:24 (7.4)
Sponsor Org: OGP	Program: EPSC	Purpose: FLT #11

AOC Personnel

AC: KENUL ✓	Sys Eng:
CP: TEBEEST ✓ / HALVERSON ✓	Data Sys: SMITH ✓
Nav: NEWMAN ✓	Radar: BARR ✓
FE: WADE ✓ / FLOYD	GPS/BT: LYNCH ✓
Avionics: ROGERS ✓	Cid Phys:
FD: DAMIANO ✓	

Participating States/USAF/NOAA/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CARRILLO, C ✓	PF	NEW MEXICO TECH
COOK, T ✓	AXBT	U of Miami
MCGAULEY ✓	AXBT	U of Miami
YANG, H ✓	OBS	U of Miami

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

TA down 1715Z weak reflectivity until then. Flew in formation with NEAR C130
 Backup at 1730Z
 1555Z - 1640Z
 Bal DW2
 1810Z

105
 52
 210
 525
 5410

Flt ID: *I011006*Time Off: *1540Z*Time On: *2304Z*

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	<i>997.0</i>	<i>29.95</i>	<i>993.8</i>	<i>29.87</i>

	Number	Data Disposition/Date/Quality
Slow/Fast Fit Lvl Tapes	<i>2</i>	
Radar Tapes	<i>1</i>	
Cloud Physics Tapes	<i>1</i>	
Video Tapes	<i>4</i>	
AXBT	<i>45</i>	<i>39 good; 6 bad</i>
AXCP		
AXCTD		
Dropsondes	<i>15</i>	<i>13 good; 2 no winds</i>

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

Remarks

NOAA • AOC • SED Flight Performance Log

Aircraft : N43RF

Project : Hurricane '01 / Epic

Mission : EPIC #11SED Crew: Lynch, ROGERS, SMITH, BARRFlight ID : 011006IPre-Flight: 1351ZTake-Off: 1539Landing: 2304

System			Pre-Flight	In-Flight	Post-Flight		
NAV	INE #1	Aligned to : <u>0</u>	<u>TL</u>		<u>-3.0</u>	<u>4.2</u>	<u>5.3</u>
	INE #2	Aligned to : <u>0</u>	<u>TL</u>		<u>-6.0</u>	<u>4.4</u>	<u>2.0</u>
	GPS		<u>JAS</u>		Lat	Long	GS
	Diff GPS		<u>JAS</u>				
RADAR	Nose		<u>TL</u>				
	L/F	R/T SN : <u>10Z</u>	<u>JMB</u>		Mod Switch Off ? <u>JMB</u>		
	Tail	R&T SN : <u>201123</u>	<u>JMB</u>	<u>(3)</u>	Mod Switch Off ? <u>JMB</u>		
	MARS Data System		Clean DAT? <u>JAS (16)</u>		# DATs : <u>1</u>		
PMS	2DG-C	Ch 1/64: <u>/</u>	<u>N/I</u>				
	2DG-P	Ch 1/64: <u>/</u>	<u>N/I</u>				
	FSSP	Ref VDC: <u>8.3</u>	<u>TL</u> <u>(1)</u>				
	SEA Data System	<u>DAT</u>	<u>TL</u>		# DATs : <u>1</u>		
TEMP		Cal High	Cal Low			Cal High	Cal Low
	Temp #1	<u>430.5</u>	<u>-32.3</u>	<u>JMB</u>		<u>30.5</u>	<u>-30.1</u>
	Temp #2			<u>JAS</u>			
	Temp #3	(Starboard)		<u>N/I</u>			
	Dewpoint #1	(General Eastern)		<u>JAS</u>			
	Dewpoint #2	(Edge Tech 137)		<u>JAS</u>			
	Dewpoint #3	(Buck 1011C)		<u>JAS</u>			
PRES	Attack Angle	(AP/DAP)	<u>JAS</u>				
	Slip Angle	(BP/DBP)	<u>JAS</u>				
	Differential	(PQ1/PQ2/PQ3/PQ4)	<u>JAS</u>				
	Absolute	(PS1/PS2)	<u>JAS</u>				
	Radome Transducers		Plugs ? <u>JMB</u>		<u>JMB</u>		
	Cabin Transducer	(Station 5)	<u>JAS</u>				
	Apn-159	SN: <u>66-024</u>	<u>TL</u>		Off ? : <u>TL</u>		
Apn-232	SN: <u>1761</u>	<u>TL</u>		Off ? : <u>TL</u>			
FLTLVL	King Liquid Water		<u>N/I</u>				
	J&W Liquid Water		<u>JMB</u>				
	Down PRT-5	(SST)	<u>TL</u>				
	Side PRT-5	(CO ²)	<u>N/I</u>				
	RAMS Data System		Clean DAT? <u>JAS</u>		# DATs : <u>2</u>		
	F/D Laptop		<u>JAS</u>		Off ? <u>TL</u>		
	C.I. Printer		<u>JAS</u>				
MISC	ASDL		<u>TL</u>		Off ? : <u>TL</u>		
	Sat Comm Workstation		<u>JAS</u>				
	Exterior Walk Around		<u>JMB</u>				
	Video	<u>(N) L R (D)</u>	<u>JAS</u>		Lens Covers ? : <u>JAS</u>		
	AXBT Receivers		<u>(2)</u>				
	AXBT Sonobouys		#On Board : <u>45</u>	# Dropped : <u>45</u>	# Good : <u>45</u>		
	AXBT CAD's		#On Board : <u>0</u>	# Fired :	#On Board :		
	AVAPS		<u>JMB</u>				
	GPS Dropsondes		#On Board : <u>30</u>	# Dropped : <u>15</u>	# Good : <u>13</u>		
	FCU	<u>GCD</u>	<u>JMB</u>		UPS Off : ? <u>TL</u>		
	USER	NASA SRA		<u>N/I</u>		Accelerometers	
Quadrant SFMR			<u>TL</u>		#1 (2 G) : <u>8194</u>		
HRD Workstation			<u>N/I</u>		#2 (2.5 G) : <u>6686</u>		
Lawrence Water Collection			<u>N/I</u>		#3 (3 G) : <u>5967</u>		
AXCP					#4 (3.5 G) : <u>2892</u>		

Please Note any Discrepancies

[illegible]

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
155530	1458	9547												
160030	1440	9548												
160940	1411	9529												
161440														
161502														
162700	1323	9439												
163200														
165930	1158	9300												
165935	1158	9300												
170632	1130	9300												
171359	1100	9300												
172126	1030	9300												
172854	1000	9300												
172900	1000	9300												
173624	930	9300												
174353	900	9300												
175129	830	9300												
175953	800	9303												
175958	800	9304												
180420	800	9320												
180910	800	9340												
181410	800	9400												
181942	804	9420												
181949	804	9420												
182654	830	9420												
183451	900	9420												
184248	930	9420												

16

4

EPIC #11

Formation Flight with NCAR C130

Flight #11 011006I

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	2(EdgeTech)
Altitude (for vertical wind)	RA159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3015.CON

Notes:

There were no time/data gaps.

Several spikes in both the pitch and roll output, PC2 and RL2, were noted from 1543Z - 1610Z. These spikes were removed and patched over.

A few spikes in the EdgeTech dewpointer, DW2, were noted from 1808Z - 1811Z and 1815Z - 1819Z. These spikes were removed and patched over.

During periods of heavy precipitation, the dewpoint temperature, TD, was greater than ambient temperature, TA.

The King Liquid Water probe was inoperative for the entire flight.

The ground speed data from both inertials was marginal at best. INE2 was selected as being the best of the two.

All other instruments worked optimally during the flight.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	997.0mb	993.8mb
Corrected tower pressure	NA	NA

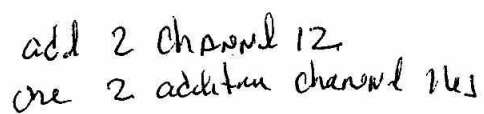
The aircraft INE positions were renavigated with respect to GPS.

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.

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

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _s	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
185040	1000	9420												XBT
185043	1000	9420												(90) DROP
185829	1030	9420												XBT
190615	1100	9420												XBT
191419	1130	9419												XBT
192252	1200	9424												XBT
192254	1200	9424			66	23	17.5	14.8						(124) DROP
192439	1200	9431												(50) DROP
192640	1200	9440												XBT
193124	1200	9500												XBT
193557	1200	9520												XBT
194121	1157	9541												XBT
194126	1157	9541			77	22	17.3	15.1						(55) DROP
194818	1130	9540												XBT
195554	1150	9540												XBT
200332	1030	9540												XBT
201108	1000	9540												XBT
201111	1000	9540												(25) DROP
201840	930	9540												XBT
202612	900	9540												XBT
203338	830	9540												XBT
204130	800	9543												XBT
204137	800	9544												(30) DROP
204530	800	9600												XBT
205006	800	9620												XBT
205445	800	9640												(DROP) XBT
205951	803	9700												XBT
205955	803	9700												(15) DROP
210709	830	9700												XBT
211459	900	9700												XBT
212247	930	9700												XBT
213032	1000	9700												XBT
213036	1000	9700			105	17								NO W DROP
213230	1007	9700			108	24								NO W DROP
213819	1030	9700												XBT
214558	1100	9700												XBT
215340	1130	9700												XBT
210119	1200	9700			101	23								XBT
210123	1200	9700												(23) DROP

OG 6 - $A \wedge B \vdash \text{only}$



OCEAN GRID DROP LOCATIONS -AXBTs ONLY (OG6 06October2001):

14 Ch12 (Add two more to what was staged)

10 Ch14

21 Ch16 (Add the left over two as spares)

#	LAT	LON	DROP/ TYPE
1.	12-00	93-00	BT16/GPS
2.	11-30	93-00	BT12
3.	11-00	93-00	BT16
4.	10-30	93-00	BT14
5.	10-00	93-00	BT16/GPS
6.	9-30	93-00	BT12
7.	9-00	93-00	BT16
8.	8-30	93-00	BT14
9.	8-00	93-00	BT16/GPS
10.	8-00	93-20	BT14
11.	8-00	93-40	BT12
12.	8-00	94-00	BT16
13.	8-00	94-20	BT14/GPS
14.	8-30	94-20	BT12
15.	9-00	94-20	BT16
16.	9-30	94-20	BT14
17.	10-00	94-20	BT16/GPS
18.	10-30	94-20	BT12
19.	11-00	94-20	BT16
20.	11-30	94-20	BT14
21.	12-00	94-20	BT16/GPS
22.	12-00	94-40	BT12
23.	12-00	95-00	BT14
24.	12-00	95-20	BT16
25.	12-00	95-40	BT12/GPS
26.	11-30	95-40	BT16
27.	11-00	95-40	BT14
28.	10-30	95-40	BT16
29.	10-00	95-40	BT12/GPS
30.	9-30	95-40	BT16
31.	9-00	95-40	BT14
32.	8-30	95-40	BT16
33.	8-00	95-40	BT12/GPS
34.	8-00	96-00	BT16

35. ~~8:00 96:20 BT14~~
 36. ~~8:00 96:40 BT12~~
 37. ~~8:00 97:00 BT16/GPS~~
 38. ~~8:30 97:00 BT12~~
 39. ~~9:00 97:00 BT16~~
 40. ~~9:30 97:00 BT12~~
 41. ~~10:00 97:00 BT16/GPS~~
 42. ~~10:30 97:00 BT12~~
 43. ~~11:00 97:00 BT16~~
 44. ~~11:30 97:00 BT12~~
 45. ~~12:00 97:00 BT16/GPS~~
-

⇒ GPS launched by mistake with XBT

19.5 83.5

19.5 87.5

12

9453

13.5 61.5

14. 64

45 BT

39 good

15 error

2 no

5 late

NOAA • AOC • SED

N43RF AVAPS DROP LOG

Project: Hurricane/EPIC '01

Mission : EPIC#11

Flight ID : 011006I

Take Off : _____

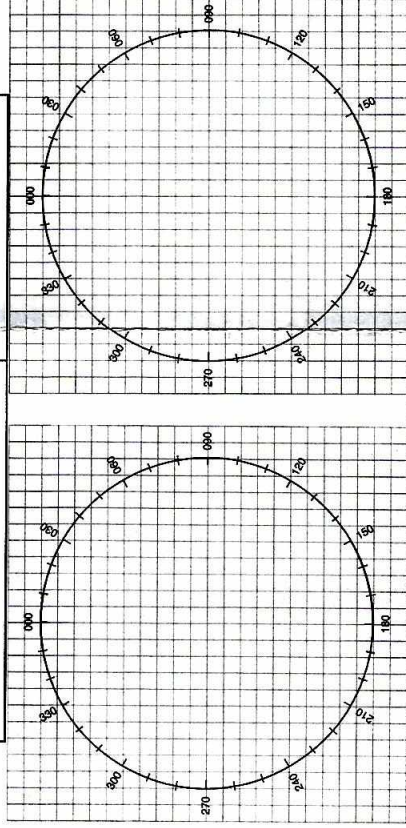
Landing : _____

[illegible]

CLEARANCES

FREQ	ALT	HDG	OTHER
			Temp 28.3
			PRESS 986.4
			PRES AT 754.5
			HUMID 23.60
			WIND 85.5 @ 2.8 m/s

MISSION LOG



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.

- 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

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE
- ENDURANCE REMAINING

[illegible]