

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

AOCWF1

Flt ID: H030630	From: KBLV	To: KBLV
Flt No: 03-26	Blk In: 0404Z	ATA: 0358Z
ETD: 0100Z	Blk Out: 0037Z	ATD: 0048Z
ETE: 0100Z	Blk Time: 3:27 (3:5)	Flt Time: 3:10 (3.2)
Sponsor Org: NCAR/NSSL	Program: Bamex	Purpose: FOPIS - Investigate RGR Echos

AOC Personnel

AC: Tebeest	Sys Eng: McMillan
CP: Silah/Tennesen	Data Sys: San Souci
Nav: Brakob	Radar: McMillan
FE: Floyd, D	GPS/BT:
FD: Shepherd/Mayeaux	Cld Phys:
Avionics: Peeke	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
✓ Jorgensen, D	Scientist	NSSL
Murphy, H	Scientist	NRL
Keeler, J	Scientist	NCAR
Rauber, B	Scientist	U.ILL
McFadden, J	Project manager	AOC

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

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

AOCWF2

Flt ID: H1030630 Time Off: 0048Z Time On:

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	<u>1018.0</u>	<u>3008</u>	<u>1018.1</u>	<u>3010</u>

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	<u>2</u>	
Radar Tapes	<u>1</u>	
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes		

Video

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

Remarks



NOAA P-3 N42RF
BAMEX
INVESTIGATION FLIGHT 15



Flight ID: H030630

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1 (General Eastern)
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2032.CON

Notes:

There was one time/data gap during this flight which occurred from 020241Z-020300Z.

Substituted Radar Altimeter 232 for 159 during the times 004501Z-004830Z and from 035631Z - 040200Z.

Johnson-Williams Liquid Water Sensor could not be base lined to zero.

King Liquid Water sensor was inoperative after 0240Z.

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	1018.0 mb	1018.1mb
Corrected Tower Pressure	1001.9 mb	1002.6 mb
Flight Director:	Martin Mayeaux (813) 828-3310 ext. 3086	

Flight ID: H030630

Page__ of_

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
005200	3823	8944	257	257	209	4.7	16.5	5.5	1549	1561	—	836.8	64.9	Cirrus overhead
011200	3908	9109	298	296	263	10.0	2.1	-8.8	3628	3631	—	647.0	74.3	
013722	3927	9316	261	262	311	13.0	4.2	4.6	3069	3009	—	696.6	78.0	Turn to mc
015447	3917	9446	265	262	214	16.4	5.2	3.5	3023	2953	—	699.2	79.8	OVC 110/Turn
020823	3832	9502	199	198	194	04.4	5.4	4.6	3022	2910		699.2	81.7	Turn
022500	3733	9446	180	180	185	13	6.5	-2.4	3021	2897		699.1	82.9	Lightning
024200	3709	9519	28	28	208	10	7.0	6.5	2771	2638		725.0	92.7	Turn/Lgt hit
025300	3752	9450	30	32	159	21	8.0	2.0	2684	2602		728.1	75.1	
0258	3809	9438	28	32	173	26.0	7.6	3.5	2713	2646		726.7	75.3	End of Science
End of Science														
032300	3825	9228	86	87	195	8.2	8.8	-6.1	2714	2630	—	726.8	76.5	OVC OVC 200
034100	3831	9050	90	91	211	6.8	3.0	-2.4	2234	2185	—	774.0	63.0	OVC OVC 200

```

TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
BAMEX FLIGHT 15
YYMMDDL FLT I.D.
030630H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
004501
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
040200
HHMMSS TAKE OFF TIME
004800
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
16
* -----LOGICAL UNIT OF INPUT DATA (I1) 5, 8 OR 9 FOR TAPE DRIVE
8
* -----LOGICAL UNIT OF OUTPUT TAPE DRIVE (I1) [FOR STANDARD TAPE ONLY]
8
* -----LOGICAL UNIT OF PRINTER (I1)
6
* -----DATE OF PROGRAM (MMDDY)
06094
* -----STATIC PRESSURE PROBE (I1)
* 1 = PSW (WINGTIP)
* 2 = PSF (CO-PILOT/FUSELAGE)
* 3 = FUTURE USE
2
* -----DYNAMIC PRESSURE PROBE (I1)
* 0 = PQW(WINGTIP)
* 1 = PQF1 (FUSELAGE 1281)
* 2 = PQF2 (FUSELAGE 1221)
* 3 =FUTURE US
1
* -----INE SELECTION (I1)
* 1 = INE 1
* 2 = INE 2
2
* -----ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
2
* ----- TOTAL TEMPERATURE PROBE (I1) [1 OR 2]
1
* ----- DEWPOINT TEMPERATURE PROBE (I1) [1 OR 2]
1
* -----ALTIMETER OPTION (I1) - FOR VERTICAL WIND COMPUTATION
* 0 = PRESSURE ALTITUDE (OVER LAND)
* 1 = RADAR ALTITUDE APN-159 (OVER WATER)
* 2 = RADAR ALTITUDE APN-232 (OVER WATER)
0
* -----PRINTOUT RATE SECONDS (I2)
90
*-----WINDSPEED/DIRECTION RUNNING AVERAGE TIME, SECONDS (I2)
10 ! FOR STANDARD TAPE OUTPUT ONLY
* -----TIME OPTION (I1)
* 1 = MICRO 29
* 2 = TIME BASED GENERATOR #1
* 3 = TIME BASED GENERATOR #2
1
* -----NAME OF CONSTANTS FILE EX CO3863.CON
CO2032.CON
*****

```

030630H

Post Processing

TA1

Bad data

020241-020300

TD1

PQF1

PSF

INW-2

A few areas where TD1 Greater than TA1
InW fire

040200; 0.6, -0.4

030200; 0.4, -0.3

020200; 0.3, -0.1

010200; 0, 0.1

RASubstitutions- 004501-004830
035630-040200

8>9<8

PAGE OF

395 feet 93 sq

956	37	← 954	38	956	37.6
957	37	← 954	38	956	37.6

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 42 NOAA 42
THIS IS NOAA _____, NOAA _____

- POSITION _____ N / S _____

- HEADING _____ TRUE/MAG _____

- AT _____ KTS TRUE/INDICATED
- FLIGHT LEVEL OR ALTITUDE

- WE ARE A P-3 AIRCRAFT WITH 16 SOULS ON BOARD

- NATURE OF EMERGENCY

- ASSISTANCE DESIR
- PILOT INTENTIONS

- WE HAVE _____ ENDURANCE REMAINING _____