

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

AOCWF1

Flt ID: 1H030622	From: KBLV	To: KBLV
Flt No: 03-19	Blk In: 0814	ATA: 0808Z
ETD: 0030	Blk Out: 0035Z	ATD: 0046Z
ETE:	Blk Time: 07:39 (7.7)	Flt Time: 7:22 (7.4)
Sponsor Org: NSSL/NOAA	Program: BAMEX	Purpose: IDP 410 N. DAKOTA

AOC Personnel

AC: TENNESEN	Sys Eng:
CP: SILAH / TEBEEST ✓	Data Sys: PEEK ✓
Nav: BRAROB ✓	Radar: MCMILLAN
FE: TORREY	GPS/BT:
FD: DAVIDANO / MAYEAUX	Cld Phys:
Avionics:	SHEPHERD ✓

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
JORGENSEN ✓	PI	NSSL
SMULL ✓	ASST. PI	NSSL
McFARQUAR ✓	PMS	U-ILL
CELLETTE ✓	PMS	U-ILL
MUSCROVE ✓	OBS	NCAR
HENCE ✓	↓	↓
TENSEN ✓		
BARE		WRL

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

T/O delayed due to fueling. DW1 out... only have DW2 2 files for laptop data
 0119Z Dave J ~~talked~~ talked to NLRP3
 NLRP3 has no SATCON... no WSI images due to NCAR/RAF problems
 line moving E at 35 kts
 cells moving NE at 45 kts
 End of Service - 061400Z

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AOCWF2

Flt ID: H030622 Time Off: 0046Z Time On: 0808Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	<u>998.5</u>	<u>29.98</u>	<u>1001.4</u>	<u>29.99</u>

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes		
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes		

Video

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

Remarks

End of Science-061400Z



**NOAA P-3 N42RF
BAMEX
INVESTIGATION FLIGHT 10**



Flight ID: H030622

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	2 (Edge-Tech)
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 a number of time/data gap during this flight which occurred from 005111Z-015120Z; 005721Z-005730Z; and from 005911Z-05920Z.

Substituted Radar Altimeter 232 for 159 during the times 004300Z-004700Z and 080600Z-081100Z.

Johnson-Williams Liquid Water Sensor could not be base lined to zero and was not recording data from 004300Z-013300Z.

Corrected data spikes in Edge-Tech Dewpoint Sensor during times and from 033300Z-033800Z; 035200Z-035400Z; 042212Z-042700Z; 054531Z-055200Z; 055930Z-060030Z; and 061820Z-062000Z.

Otherwise, all instruments worked optimally during the flight.

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	998.5 mb	1001.4 mb
Corrected Tower Pressure	998.5 mb	998.8 mb

Flight Director: Martin Mayeaux (813) 828-3310 ext. 3086

Flight ID: 14030622

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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
010800	3903	9058	298	298	208	6	4.8	-33.1	3646	3594	980.0	645.4	83.8	CIR ABV
014700	4103	9408	308	307	218	10	3.6	-2.6	3704	3512	970.6	640.5	94.6	HAZE
022200	4259	9653	326	324	211	16	4.6	-11.0	3703	3455	962.0	640.6	94.5	HAZE
023000	4327	9727	278	278	247	15	4.3	-13.3	3703	3379	955.7	640.6	95.1	CIR ABV
024200	4330	9841	244	243	228	19	3.4	-9.4	3703	3333	952.2	640.6	94.7	CIR ABV
025800	4324	9924	20	20	203	18	3.9	-7.3	3613	3127	939.4	648.0	72.0	LGT & left
030800	4407	9859	25	23	219	24	4.7	-10.1	3593	3129	941.9	650.0	69.7	LGT & left
031500	through line													
032800	4455	9919	204	211	256	32	7.1	-0.8	3140	2588	934.7	684.2	70.6	stop line line B
033800	4420	9937	180	187	273	31	5.5	1.1	3159	2623	937.3	686.5	70.1	line
034100	LGT - TURB													
034800	4350	end leg 1												
035700	orbit twice for NPLP3 to catch up													65.4
0400	TA not looking good reflectivity													
040700	4442	9858	32	29	271	16	5.8	1.4	3151	2773	954.3	689.6	61.9	LINE
041600	passing large cell													
044600	Orbiting due to radar problems													
0447	46°14	9758	116	117	260	29	7.3	1.4	3094	2739	957.2	692.7	62.1	CIR
052400	4536	9656	208	208	208	29	-7.8	-8.5	5199	4952	963.0	531.5	69.6	Spiral in notch
060200	4842	9727	180	191	281	35.2	3.7	2.4	3122	2627	945.2	690.3	67.8	Hoguy dash
061444	4453	9721	135	142	220	31.8	6.4	-5.5	3129	2665	946.5	691.5	68.7	CIR
End of Science														
064100	4334	9529	138	142	220	24.4	-9.4	-16.7	5197	4945	961.7	526.1	83.4	CIR
071000	4144	9316	139	142	208	15.6	-6.4	-11.4	5196	5170	979.4	525.4	96.1	CIR
074400	3938	9052	140	141	174	10.9	3.7	-38.4	3753	3643	984.0	644.3	80.0	CIR


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TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
BAMEX FLIGHT 10
YYMMDDL FLT I.D.
030622H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
004301
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
081100
HHMMSS TAKE OFF TIME
004600
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
11
* -----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]
2
* -----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)
30
* -----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
*****

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Post Processing

DW2 used. DW1⁰ out

PQF 1 is good, PQR Bad

Π_2 is ~~the~~ best

TT1 is ~~not~~ best
Data gaps - 0057, 0059, 05:14:41 - 05:14:50 Z
(005111-005120)(005721-005730)(005911-005920)
(005141-051450)

RA 159-232 substitution 0806-End 0042-0044
~~LWJWC~~ LWJWC-0050-0130.

Renav

081100; 2.7, -2.2

071100; 2.0, -1.5

061100; 1.5, -0.6

051100; 1.1, 0.2

041100 .5, .0

031100.2, 2

021100 .1, .1

01100 .1, .1

Patch Dependent Z

Patch Denpoint Z
Times = 033301-033800 10-51 wt. .05 032901-03³300 - Cleared up spikes
054048-054800

✓ 054531 - 0545200 the moved spike 9-52 wt (1.5)

✓ 042212-002 042350 21-34 wt(.01) 00-

✓ 042400-042700 - 21-48 wt(.01)

✓ 055930 - 060030 23-34 wt(01)

✓ 055930 - 061800 - 35 wt (.01)

035200 - 035400 24 40-50 wt (.0)

030622H

- King LWC looks bad.

- LWC_{SW} has problems in the first hour but seems to recover to a trend.
However, it is all below 0

7 mb difference b/w PDAF-PDAR

10 mb difference b/w PDSE-PDSR. Erroneous data b/w 5:10 and 5:35Z
for PDSE

Data gap 0514Z

Major data spike b/w Pqfz and PQR at 0524-0534Z

Inertial 2 is better

Spike in TT1 & TT2 Difference at 0524-0529Z

~~HA is out~~

Dewpoint 1 is out

