



NOAA P-3 N43RF CBLAST- HURRICANE FABIAN INVESTIGATION FLIGHT 3



Flight ID: 030904I

<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)	Radar Altimeter 232
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage 1281
Time Source	Micro 99
Constants File	CO3033.CON

Notes:

There were several time/data gaps during this flight which occurred during the times 171111Z-171130Z, 195311Z-195330Z, 210441Z-210450Z, 235251Z-235300Z, 235401Z-235410Z, 235501Z-235510Z, 235531Z-235540Z, 235551Z-235600Z, 235621Z-235640Z, 235651Z-235710Z, 235731Z-235740Z, 235801Z-235830Z, 235841Z-235900Z, and 235911Z-235940Z.

All instruments worked optimally during the flight. However, there were numerous times during the flight where the dewpoint temperature exceeded ambient temperature resulting in an RH>100%. This was likely due to heavy rain (as noted by the Johnson-Williams Liquid Water Sensor), 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 to the dewpoint values 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	1012.3 mb	1014.0 mb
Corrected Tower Pressure	1009.8 mb	1012.8 mb

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

Fit ID: 036904I	From: KESX	To: KESX
Fit No: 03-073	Blk In: 0056 Z	ATA: 0052 Z
ETD: 1700 Z	Blk Out: 1656 Z	ATD: 1700 1704 Z
ETE:	Blk Time: 8:00 (8.0)	Fit Time: 7:48 (7.8)
Sponsor Org: HRD	Program: CBlast	Purpose: Fabian

AOC Personnel

AC: Tennesen	Sys Eng:
CP: Shady / Tebeest / silah	Data Sys: Lynch
Nav: Adler	Radar: San Souci
FE: Bast / Floyd	GPS/BT: Tony
FD: Mayeaux / Damiano	Cid Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
Walsh, Ed	Sci	NOAA/Nasa
Black, Mike	Sci	HRD
Landsea, Chris	Sci	HRD
Whitcomb, Eric	Sci	
Whithorn, Eric	Sci	SCIPPS HRD
Lasswell II, Jim	Sci	SCIPPS
French, Jeff	Sci	HRD NOAA/ETL
Rogers, Rob	Sci	HRD

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

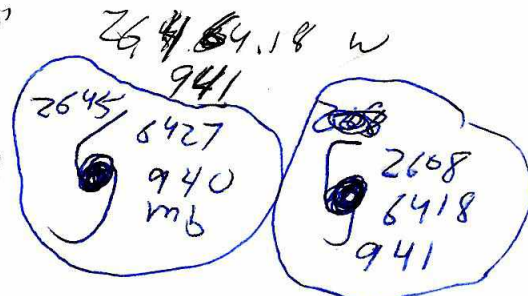
2 CH12 AxBT 501 2530 653 AF 25°34' 64" 18' Fix 1719 Z

2 CH16

2 CH10 Sonarway Step Descent

2030 Z - Modified step frequency

Through Storm
Negative



2 Penetrations

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

ASCMF-2

File ID: 030904I Time Off: 1704 Time On: 0052

	W/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	10.11	2989	10148 10148	2998

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes	2	
AXBT	4	
AXCP		
AXCTD		
Dropsondes	8	
Sonabuoys	1	

Video

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

Remarks 17.7 648

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt	Geo. Alt	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
171236	1800	6448	39	41	210	12.4	15.7	-1.5	2124	2251	1014.2	782.8	87.6	ScbCu
Comparison														
174818	2016	6422	030	32	214	16.1	18.8	13.3	1436	1519	1013.6	852.1	69.7	Start Box leg 1
174818	2023	6418	036											End Box leg 1
174923	2023	6414	120											Start Box leg 2
175123	2019	6407	120											End Box leg 2
175226	2016	6407	210											Start Box leg 3
175426	2010	6411	210											End Box leg 3
175528	2010	6414	300											Start Box leg 4
175728	2013	6421	300											End Box leg 4
175825	2017	6421	-											Start Circle Right
180018	2017	6420	-											End Circle Right
180045	2019	6420	-											Start Circle Left
180241	2020	6419	-											End Circle Left
182808	2211	6442	348	344	248	28.1	4.6	-8.5	3827	4029	1011.8	630.6	93.4	Clear
Eye Figure 4														
193207	2510	6445	25	08	293	744	19.7	14.1	1589	1496	792.2	838.1	64.9	Abort
194131														Drop 1
194201														Drop 2
194231														Drop 3
194301	2547	6426												Drop/ST
In Eye														
200109	2607	6415	104	178	208	50	21.0	20.6	2003	1508	942.2	794.5	74.2	Eye
201906	2610	6411	24	26	197	68	21	19	1499	1507	943.1	795.3	79.8	Start leg
202208														Abort/Drop
202238														Drop
202308														Drop
202335														Drop
202408	2632	6359												BT
205241	2807	6339	103	124										Small Leg Strongly
210509	2806	6316	91	91										End leg
211214	2808	6318	306	311										Start leg
211930	2823	6354	234	225										End leg

1850B

TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	+3.9	-1.8
DELTA LON	-9	-1.8
RGS	6	5
RADIAL ERROR	4	2

[illegible][illegible]

N43RF AVAPS DROP LOG

Project : Hurr '03 / CBLAST

Mission : HURR FABIAN 3

Flight ID : 030904I

Take Off :

Landing :

[illegible]

NOAA • AOC • SED
N43RF AXBT DROP LOG

Project : Hurr '03 / CBLAST

Mission : 44RR FABIAN 3 Flight ID : 03 09 04 I

Operators : Tong

Take Off : _____ Landing : _____

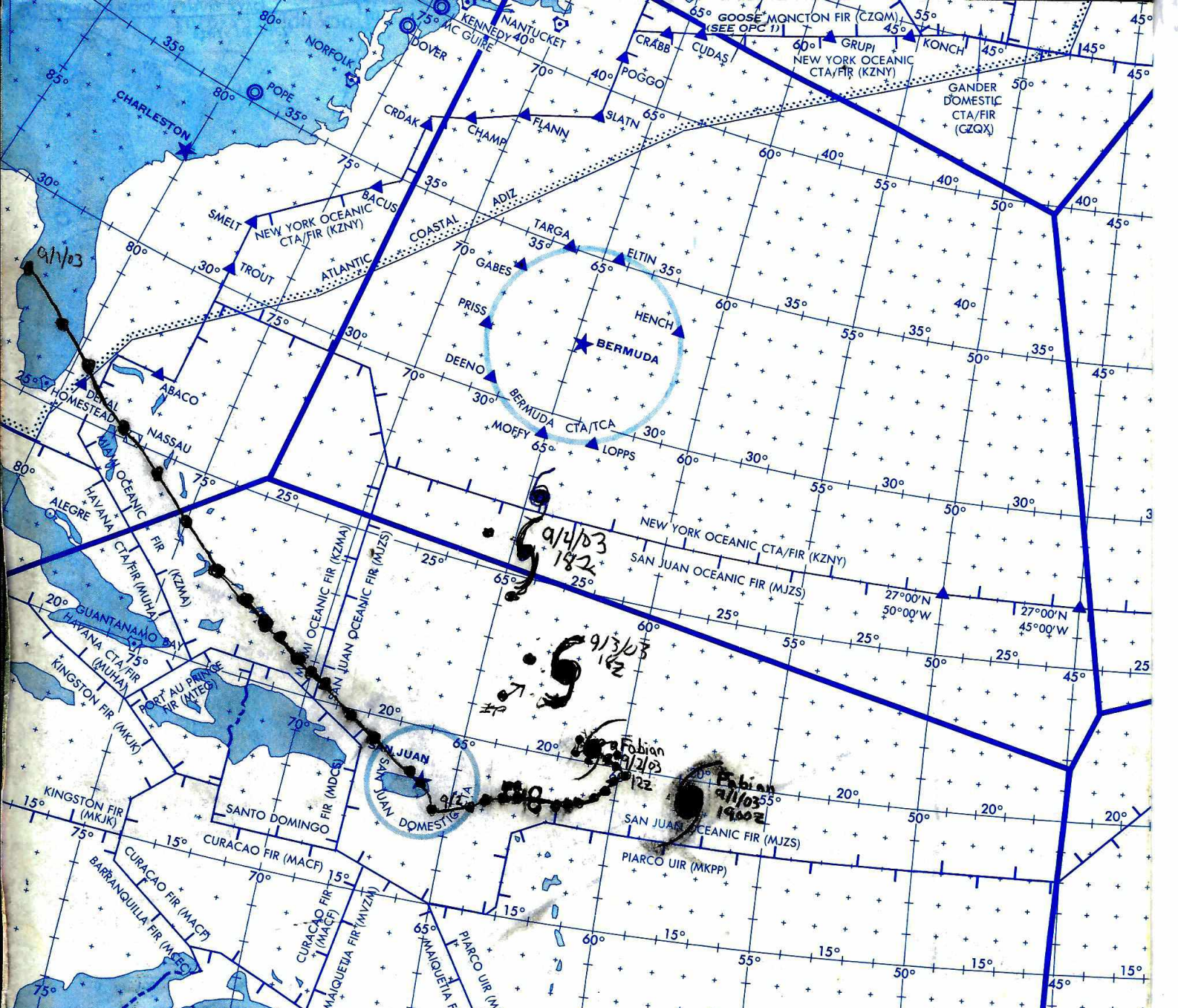
[illegible]

I03090

SONDE ID	MISSION NAME	LAUNCH TIME	CH #	LAUNCH		AC FL PRESS (mb)	AC FL TEMP (C)	AC FL RH (%)	AC FL WIND (m/s)	AC FL WIND (deg)	AC ALT (m)	Last Press (mb)	Last Press Time (SEC)
				DETECT DELAY (SEC)	DETECT PIN PULLED								
23535360	030904i	194144.7	1	0.0	T	821.30	19.30	92.18	41.70	287.20	1506.1	868.33	37.5
23535379	030904i	194205.7	2	0.0	T	817.80	19.20	93.34	42.50	284.80	1533.1	972.98	124.1
32335361	030904i	194235.4	3	0.0	T	818.40	19.80	90.49	43.40	284.00	1509.1	970.08	132.4
23535352	030904i	194307.2	4	0.0	T	817.30	20.60	87.76	45.60	282.30	1498.1	968.00	120.6
23235030	030904i	202213.4	1	0.0	T	789.90	18.00	112.60	60.60	148.30	1686.9	954.85	143.1
32335362	030904i	202243.6	2	0.0	T	792.40	17.50	116.21	64.70	142.10	1696.9	959.49	143.4
23535008	030904i	202313.3	3	0.0	T	799.00	17.60	112.64	59.50	138.70	1664.0	962.56	128.7
23618044	030904i	202343.1	4	0.0	T	804.30	17.90	108.49	58.90	131.50	1635.0	967.09	124.9
23535353	030904i	221149.7	1	0.0	T	816.90	20.70	88.87	43.80	24.90	1514.2	969.58	115.6
23618011	030904i	221219.2	2	0.0	T	814.80	19.20	99.38	49.00	21.50	1514.2	968.54	129.6
23535364	030904i	221248.2	3	0.0	T	812.90	18.90	103.17	46.60	18.80	1512.2	963.60	112.6
23235029	030904i	221319.3	4	0.0	T	807.80	18.30	107.12	46.40	23.90	1538.2	959.45	123.5
23618018	030904i	223742.3	1	0.0	T	813.20	21.40	72.24	54.70	197.10	1541.2	966.02	139.2
23535361	030904i	223813.2	2	0.0	T	817.60	21.50	73.65	53.50	197.80	1510.2	969.75	128.8
23535005	030904i	223847.2	3	0.0	T	819.00	22.20	67.05	52.40	192.50	1519.2	970.90	117.1
22625192	030904i	223913.0	4	0.0	T	819.70	21.80	70.94	50.80	192.80	1523.2	973.28	121.5

~ 4.5mb

Last Wind Dir (deg)	Last Wind Speed (m/s)	Last Wind Offset (SEC)	Winds Acquire Time (sec)	PTH Data Good (%)	Wind Data Good (%)	Temp Equil. Delay (sec)	Max Wind (m/s)	Max RH (%)	RH1 Fail Press	RH2 Fail Press	RH1/ RH2 Delta >10
293.5	39.35	2.0	16.5	80.0	51.3	13.5	40.8	92.2	F	F	F
266.7	32.09	-0.4	41.1	99.9	95.4	20.5	46.1	93.7	F	F	F
-99.0	-99.00	-99.0	-99.9	99.3	0.0	15.4	0.0	99.0	F	F	F
264.3	35.49	-0.4	19.0	99.1	96.6	17.0	47.2	95.0	F	F	F
107.9	68.73	18.0	15.1	98.5	85.5	9.1	74.6	100.0	F	F	F
-99.0	-99.00	-99.0	-99.9	96.9	0.0	14.9	0.0	100.0	F	F	F
99.7	52.13	1.0	21.7	97.5	93.9	10.2	65.0	100.0	F	F	F
98.9	54.54	2.0	21.9	99.7	98.5	8.4	62.7	100.0	F	F	F
352.2	36.46	-0.5	21.6	99.5	97.4	9.1	50.9	92.9	F	F	F
348.6	35.62	-0.5	22.1	98.8	98.6	12.1	53.2	95.7	F	F	F
352.4	42.84	-0.5	22.1	99.5	96.7	11.6	58.2	93.0	F	F	F
346.7	54.42	1.5	15.0	98.0	89.3	10.5	58.5	97.7	F	F	F
178.2	53.55	8.0	65.2	99.1	95.5	11.2	56.7	97.2	F	F	F
182.9	52.35	18.5	84.8	99.4	96.2	22.3	53.2	88.8	F	F	F
177.9	48.21	7.5	29.6	99.9	55.9	6.1	50.0	95.1	F	F	F
174.5	41.48	-0.5	23.5	99.2	91.4	10.0	51.3	99.9	F	F	F



OCEANIC PLANNING CHART (EQUATOR NORTH ATLANTIC)

OPC 2

1st EDITION APRIL 1982

PUBLISHED BY DMAAC
ST. LOUIS AFS, MO. 63118

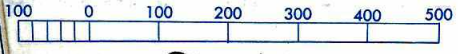
Lithographed By DMAAC 7-90

Oblique Mercator
Projection



- LEGEND**
- ★ DIVERSION AIRFIELD
 - VHF OMNI RANGE (VOR)
 - ◻ VORTAC
 - ◻ TACAN
 - ◻ VOR DME
 - Other Facilities

APPROXIMATE SCALE 1:20,000,000
NAUTICAL MILES



fabian '03

Caution
Consult NOTAMS FLIP Enroute
Supplements and Area Planning
for latest information.

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