

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

AOCWF1

Flt ID: 031210I	From: KMCF	To: KMCF
Flt No: 04-010	Blk In: 1751Z	ATA: 1742Z
ETD: 1500Z	Blk Out: 1455Z	ATD: 1504Z
ETE: 4:00	Blk Time: 2:56 (2.9)	Flt Time: 2:38 (2.6)
Sponsor Org: AOC	Program: SFMR	Purpose: Test Pattern

AOC Personnel

AC: Tebest, R	Sys Eng:
CP: Silah, M	Data Sys: Lynch, T
Nav: Adler, J	Radar: Tong, R
FE: Floyd, D	GPS/BT: Smith, J
FD: Mayeaux, M / Domiano B	Cld Phys:
Avionics:	Goldstein, A

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
Walsh, Ed	Sci	NOAA/NASA
Asher, B	Sci	University, Alaska WSU
Litthindorf, T	Sci	University, New York WSU

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

Balanced Descent: at 1520Z

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AOCWPF2

Flt ID: 031210I

Time Off: 1504Z

Time On: 1742Z

	AVC (Take Off)	Wx Station (Take Off)	AVC (Land)	Wx Station (Land)
Pressure	1012.8	2994	1009.6	2991

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

Video

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

Remarks



NOAA P-3 N43RF SFMR COMPARISON



Flight ID: 031210I

Sensor or system

Number or Name

INE

1

Accelerometer

1

Temperature Probe

1

Dew Point Probe

1 (General Eastern)

Altitude (for vertical wind)

Radar Altimeter 159

Static Pressure

Rosemount Fuselage

Dynamic Pressure

Rosemount Fuselage 1281

Time Source

Micro 99

Constants File

CO3034.CON

Notes:

There was one time/data gap during this flight which occurred between 170421Z and 170440Z.

From 150101Z-150400Z and from 174130Z-174500Z, Radar Altimeter 232 was used in place of Radar Altimeter 159.

There were a couple of times during the flight where the dewpoint temperature exceeded ambient temperature resulting in an RH>100%. This was likely due to heavy rain, 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. Since the relative humidity values during these times never exceed 110%, no corrections were made to the data.

A spike in the dewpoint measurements due to sensor balancing between 151501Z and 152300Z was removed.

Otherwise, all instruments performed optimally during the flight.

The aircraft INE positions were re-navigated 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	1012.8 mb	1009.6 mb
Corrected Tower Pressure	1013.9 mb	1012.9 mb

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

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30 sec
5 days
100 days
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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
150800	2746	8233	185	189	214	25.4	17.9	12.9	978	1131	1013.4	1231	71.5	250 390 160
153833	2650	8436	232	238	270	35.1	1.6	-25.8	3872	4023	1012.3	826.7	86.6	
160240	2559	8660	261	261	262	27.1								Start leg 1 15K
160510														End leg 1 15K
160835	2558	8608	81	82	264	28.8	20.9	17.4	432	448	1013.1	862.5	79.0	Start leg 2 15K
161105	2600	8558												End leg 2 15K
							5000 ft							
161430	2600	8554	255	255	255	29.2	19.6	9.6	1461	1523	1014.1	844.7	75.9	Start inbound 1
161700														End leg 1
162020	2558	8604	070	073	250	32.1								Start outbound 2
162250	2602	8550												End leg 2
162840	2608	8556	160	168	250	29.7								Start cross 1
163340	2549	8548												End cross 1
163640	2548	8547	340	334	249	28.6								Start cross 2
164140	2606	8554												End cross 2
164155														Turn 5 degree
164225														End Turn 5
164230														Turn 10 degree
164300														End 10 degree
164345														15 degree
164345														End 15 degree
164400														20 degree
164430														End 20 degree
End Skirmish														
170310Z														
170412	2711	8449	21	20	304	26.2	14.9	13.6	1291	1342	1011.5	858.2	75.4	DVC

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/VFOICE	VHF/VFOICE	M/F/VFOICE	H/F/CW	M/F/CW
243.0	121.5	2182 KHZ	8364 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 1-3 AIRCRAFT WITH _____ SOULS ON BOARD

- NATURE OF EMERGENCY _____

- ASSISTANCE DESIRED _____

- PILOT INTENTIONS _____

- WE HAVE _____ ENDURANCE REMAINING

[illegible]

[illegible]

INS PERFORMANCE	
INS 1	INS 2
BEGIN ALIGN TIME	1200
ALIGN STATUS: (0-5)	0
END NAV TIME	1742
START NAV TIME	1450
DELTA T	2452

TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	-2.7	-1.7
DELTA LON	+1	-6
RGS	2	3
RADIAL ERROR	3	1

[illegible]