NOAA P-3 N42RF
NEAQS 2004 Flight #12
KPSM – KPSM

Flight ID: H040803

Sensor or system	*Number or Name*
Inertial + Accelerometer Data	*1*
Temperature Probe	*1*
Dew Point Probe	*1*
Altitude (for vertical wind)	*Pressure Altitude*
Radar Altitude	*RA-159*
Static and Dynamic Pressure	*Rosemount Fuselage*
Time Source	*Micro 99*
Constants File	*CO2042.CON*

Notes:

At 0430Z, the FOUO (fire of unknown origin) checklist was initiated due to the smell of something burning in the cabin. Scientific power was shut down at 0433Z. Therefore, data for this flight was only collected up until that time. The mission was then terminated. The navigation log (sent separately) can be is the only source of position data after that time.

There were time/data gaps from 033231-40Z and 034751-034800Z. Be aware of data spikes as a result of these data gaps.

Radar Altimeter 159 was replaced with Radar Altimeter 232 from 015201-015553Z (takeoff) due to spiking.

There may have been instances when the dew point temperature exceeded the ambient temperature resulting in a RH% above 100%. These times were during heavy precipitation events and were likely due to a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dew point sensor as it tried to burn off excess moisture. These periods are typically reflected in the J/W liquid water data. No corrections were made during these events unless noted above.

All other instruments worked optimally during the flight.

The aircraft INE positions were renavigated with respect to GPS.

Due to AOC equipment/printer failure, the last step of our Quality Control process (visual QC) was not able to be performed. While other measures were taken to ensure there were no problems with the data, questions concerning questionable data should be brought to the attention of the Flight Director ASAP.

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: Paul Flaherty
Phone #: (813) 828-3310 ext. 3094

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

Flt ID: 040803H	From: KPSM	To: KPSM
Flt. No: 04-033	Blk In: 0756 z	Time On: 0747 z
ETD: [redacted] 0200z	Blk Out: 0144 z	Time Off: 0154 z
ETE: 8+00	Blk Time: 6+12 (6.2 Hrs)	Flt Time: 5+53 (5.9 Hrs)
Sponsoring Org: NOAA / A.L.	Program: NEAQS	Purpose: IOP 12

AOC Flight Crew

Aircraft Commander:	Kennedy, P	Data System:	[redacted]
Co-Pilot:	Choy, B	AVAPS:	
Navigator:	Brakob, D / Gallagher, T	System Eng:	Peek, B
Flight Eng:	WADE, S	A A:	
Flight Director:	Flaherty, P	A A:	
Avionics:	Rodgers, M	Crew Chief:	

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
RYERSON, T	Principal Investigator	NOAA AL
NOWAK, J	SCI	"
PEITER, R	"	GA TECH
DUBE, B	"	NOAA AL
HERNDON, S	"	AERODYNE

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Mission ID: 040802H SCRUBBED - NO FUEL!

FCO - SMOKE IN CABIN - MISSION TERMINATED @ 0430Z

(See reverse for additional remarks)

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Flight ID: 040803 H	Time Off: 0154 Z	Time On: 0747 Z

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1010.6 mb	2993 mb	DATA DOWN mb	COMM DOWN mb

ATIS	Time	Observation	
Takeoff	2355Z	14005KTS 20SM 22/15	2993
Land	Z		

	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		
Cloud Physics Tapes / CDs		
Video Tapes		
Dropsondes		Good: Bad:
AXBT		
AXCP		
AXCTD		

Remarks:

FOUO

Form 413-50
63

040800 H

TIME	LAT	LON	TK	HG	T	T_d	WIND DIR	WIND SPD	SFC PRESS	STAT PRESS	
025730											
020030											
020645											
020945											
021625											
021925											
022558											
022858											
030140	4242	7126	271	272	24	15	260	07	1003.4	960.0	
030410	4148	7257	281	280	21	17	192	8	1012.9	924.7	

MOSTLY CLEAR

1000FT RUN
END LEG
START 2K' LEG
END LEG
START 500' LEG
END 500' LEG
START 1000' LEG
END LEG
1500' PT 4
2500' PT 6

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
KPSM	NEARS #12	LT BRAYOB ENS GALLAGHER	CDR KENNEDY	FEAHERTY	0200Z / 0154Z	JAN 04

42 31
070 24.8

GPS	LS	WP	LAT / LON	RTE	MH	VAR +E==	TH	DR +R==	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
10	1	KPSM	43-04.7 070-49.4														0200	0154		
12	2	2	42-59.2 070-36.9	→	137	16W	121	—	121	200	L	V	200	200	11 11	+02 +03		0157	0158	PSM 138/11
13	3	3	42-42.0 070-20.0		160	16W	144	—	144						21 32	+06 +09	02[09]	02[05]	02[46]	PSM 152/32
14	4	4	42-42.0 071-36.0		287	17W	270	—	270						56 88	+17 +26	02[26]	02[20]	03[04]	MHT 240/14
15	5	5	40-51.0 071-36.0		196	16W	180	—	180						111 199	+33 +59	02[59]	02[53]	03[37]	SEY 198/19
16	6	6	41-18.0 074-00.0		300	15W	285	—	285						112 111	+33 +32	03[32]	03[26]	04[10]	HVN 212/23
17	7	7	41-00 074-48		257	13W	244	—	244						41 352	+12 1+44	03[44]	03[38]	04[23]	STW 096/3
18	8	8	40-20 074-48		193	13W	180	—	180						40 392	+12 1+56	03[56]	03[50]	04[35]	ACY 056/7
19	9	9	40-00 073-30		121	13W	108	—	108						63 455	+19 2+15	04[15]	04[09]	04[53]	JFK 174/40
20	1	10	42-13 071-30		038	14W	024	—	024						213 668	1+04 3+19	05[19]	05[13]		ORH 108/3
13	2	3	42-42 070-20		136	15W	121	—	121						60 728	+18 3+37	05[37]	05[31]		
41	3	11	41-07 070-20		196	16W	180	—	180						95 823	+28 4+05	06[05]	05[59]		ACK 250/17
42	4	12	41-00 069-20		114	16W	098	—	098						46 869	+14 4+19	06[19]	06[13]		ACK 133/36
43	5	13	42-15 069-20		016	16W	360	—	360						75 944	+22 4+41	06[41]	06[35]		LFV 082/34
42	6	12	41-00 069-20		197	17W	180	—	180						75 1019	+23 5+04	07[04]	06[58]		
43	7	13	42-15 069-20		016	16W	360	—	360						75 1094	+22 5+26	07[26]	07[20]		
44	8	14	42-15 068-20		106	16W	090	—	090						45 1139	+14 5+40	07[40]	07[34]		LFV 095/75
45	9	15	41-00 068-20		197	17W	180	—	180						75 1214	+22 6+02	08[02]	07[57]		ACK 117/79
44		14	42-15 068-20		017	17W	360	—	360						75 1289	+23 6+25	08[25]	08[19]		
45		15	41-00 068-20		197	17W	180	—	180						75 1364	+22 6+47	08[47]	08[41]		
46		16	43-30 070-30		344	16W	328	—	328						178 1542	+53 7+40	09[40]	09[34]		
10		KPSM	43-05.1 070-49.9	↓	227	17W	210	—	210	↓	↓	↓	↓	↓	29 1571	+09 7+49	09[49]	09[43]		

INS PERFORMANCE

	INS 1	INS 2
BEGIN ALIGN TIME	2349 2300	2349 2300
ALIGN STATUS (0-5)	0	0
END NAV TIME	0800	0800
START NAV TIME	0130	0130
DELTA T	6+30	6+30

TERMINAL ERRORS

	INS 1	INS 2
DELTA LAT	+3.2	+1.1
DELTA LON	-2.1	+.9
RGS	4	1
RADIAL ERROR	3	1

REMARKS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER

MISSION LOG | **PAGE ___ OF ___**

FIX TYPES
(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS