

Flt ID: 020225H	From: K PDX	To: K PDX
Flt No: 02-032	Blk In: 0517	ATA: 0512
ETD: 2100Z	Blk Out: 2102Z	ATD: OFF 2112Z
ETE: 8+00	Blk Time: 8.3	Flt Time: 8.0
Sponsor Org: NOAA/ETL	Program: PACJET OCEAN WINDS	Purpose: TOP 9

AOC Personnel

AC: TEBEEST, R ✓	Sys Eng: SMITH, J ✓
CP: HALVERSON, H / TAGGART, B ✓	Data Sys: BARR, J ✓
Nav: ADLER, J ✓	Radar:
FE: WADE, S ✓	GPS/BT:
FD: SHEPHERD, T ✓	Cld Phys:
Avionics: ROGERS, M ✓	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
PERSSON, D ✓	PI	NOAA/ETL
KNIEVEL, J ✓	RADAR	NOAA/NSSL
DAUGHERTY, J ✓	RADAR	NOAA/NSSL
ZHANG, A ✓	SFMR	UMASS
ESTEBAN, D ✓	SFMR	UMASS
UHLHORN, E ✓	AXBT	U Miami
TOMLINSON, S ✓	MEDIA	OREGONIAN
NEHL, S ✓	MEDIA	OREGONIAN

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

INE 2 position T.U. JUST AFTER T.O. - OK in ATTITUDE

813 765 1719
ROCK CELL

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

AOCWF2

Flt ID:

020225H

Time Off:

2112

Time On:

0512

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1035.2

30.58

1033.2

30.55

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

2

Radar Tapes

1

Cloud Physics Tapes

1 CD

Video Tapes

4

AXBT

4

AXCP

AXCTD

Dropsondes

Ø

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

Pacjet Ocean Winds 2002

Flight #9 020225H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	Radar Alt. (APN-159)
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2021.CON

Notes:

Takeoff: 2112Z

Land: 0512Z

There was a data gap from 001119 - 001134.

Inertial number 2 was not operating (position only) at the beginning of the flight and did not recover during the entire flight.

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (210901 - 212200) and landing (045600 - 051500).

One small spike in dynamic fuselage pressure #1 was removed and patched (214400 - 214500).

Dewpointer #1 had four spikes removed and patched (225400 - 225600, 225800 - 230000, 235000 - 235300, and 004900 - 005200). Two larger areas of spiking in dewpointer #1 occurred (014941 - 015737 and 020013 - 020321). In these areas, dewpointer #1 was replaced by dewpointer #3 with a 0.0 degree C offset.

During times when the aircraft was flying through heavy precipitation, the dew point temperature exceeded the ambient temperature resulting in humidities greater than 100%. This could also be due in part to wet bulbing effect on the total temperature sensor. No adjustments were made.

The vertical winds are calculated using the selected altimeter (radar altimeter for this flight). Therefore, the vertical wind speeds are erroneous at the beginning and end of the flight as the aircraft transited over mountainous terrain between the coast and KPDX. During this flight, during a rapid ascent for ferry back to KPDX, the vertical winds also appear to be erroneous.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1035.2	1033.2
Corrected tower pressure	1035.6	1034.5

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 resectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Flight Director: Tom Shepherd, (813) 828-3310 ext. 3053

020225H

TT# |

DP# |

INE |

AZI |

Takeoff: 2112 ✓

Landing: 0512 ✓

Time Gap: 001119-001134 ✓

DP1 ✓

235001-235300, 004901-005200, 014941-015737, 020013-020321 ✓

2254-2256, 11-46 ✓

2258-2300, 6-35 ✓

Direct
sub

Direct
sub

TT1

051408-0515

051401-10

051531-46

LANDING

No INE 2 position for flight ✓

Sub RA232 for RA159

Takeoff: 210901-212200 ✓

Landing: 045630-051500 ✓

PSF

~~2112~~, 2149

PQFI

214401-214500 ✓

PDSF

~~2112~~

1)	213000	0.0	0.1	4542.9	123	43.0	/
	215300	0.1	0.0	46	47.5	125	31.7 /
	223300	0.3	0.5	49	0.7	128	32.9 /
	230900	0.2	0.4	50	8.2	129	58.6 /
5)	234000	0.2	0.0	50	47.3	131	42.1 /
	002700	-0.1	-0.4	48	37.2	132	1.6 /
	012000	0.5	-0.4	51	7.9	130	35.8 /
	015100	-0.1	-0.2	49	58.5	131	11.4 /
	024200	0.5	0.1	50	15.7	130	^{31.1} 30.1 X
10)	031300	-0.3	-0.2	50	15.3	129	46.7
	034500	-0.7	-1.1	49	59.3	129	29.7
	043800	-0.8	-1.1	47	1.1	125	13.4
	050700	-1.2	-1.7	45	39.9	122	46.4
14)	051500	-1.1	-2.1	45	35.3	122	35.0

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
213320	4547	12404	287	288	304	22.1	-12.7	-26.8	4689	4877	1029.7	563.0	87.9	Just back coast CABV
215750	4704	12553	319	316	272	22.8	-15.9	-21.2	4840	5017	1032.9	551.9	87.4	16500 RA OVC ABV
223540	4909	12845	316	307	232	46.7	-17.8	-24.0	4837	4970	1032.2	552.1	79.8	BKN B46 OVC ABV
225120	5000	13001	Spiral down TO 1000 TO TRK								297	↓ 200	↑ 1000	
231000	5010	13004	Touch 200'											
232425	5032	13124	294	286	191	32.6	4.5	5.4	154	199	1031.7	994.7	83.6	BT1
232800	5036	13143	289	289	282	11.9	4.1	3.0	155	298	1031.9	994.8	85.5	Thru front
233355	5044	13214	Turn (R) TO TRK 090											
233521	5047	13209	Porpoise ↑ 6000' ↓ 1000'											
233915	5047	13147	Touch 6000 ↓ TO 1000' @ 2000 FPM											
234411	5048	13116	P3 (R) TO TRK 190											
235400	5019	13123	188	190	196	30.3	4.7	5.5	153	297	1032.0	995.0	74.1	1000 RA w/ Cid mod pump
001820	4905	13152	Porpoise ↑ 5000' ↓ 1000'											
002110	4855	13155	Touch 5000 ↓ 1000'											
003215	4834	13214												BT2
003250	4836	13213	Porpoise TO 8000' back to 1000'											
004200	4908	13148	Now TRK 020 STCL ↓ TO 1000											
004310	4912	13146	TRK 015											
010705	5033	13112	015	011	272	16.0	4.1	2.8	151	297	1032.1	995.1	74.7	1000 RA
013100	5036	13111												BT3
013315	5031	13112	180	183	236	20.8	-6.3	-6.9	2328	2429	1031.7	763.1	76.9	
015440	4959	13057	109	116	201	25.8	4.5	5.2	154	303	1032.3	994.9	70.5	1000 RA
021930	4950	12948	299	295	168	21.4	5.7	4.3	-113	55	1033.7	1027.0	75.7	200 RA
024100	5016	13033	109	115	239	24.5	0.3	0.7	775	916	1033.9	923.6	72.3	3000 RA BT4
025510	4959	12917	Spiral up to 6000' ↓ 500' ↑ 1800											
032630	5045	13044	END up (R) TO TRK 135 ↓ touch 500 ↑ 10000 @ 500 FPM											
032950	5041	13029	Touch 500 climbing TO 10000											
034430	5001	12931	137	145	242	28.4	-9.8	-9.6	2988	3120	1033.0	694.5	72.8	10000 IFR END Sci climb + RT
04555	4919	12657	138	148	242	50.4	-20.8	-23.2	5331	5460	1032.5	576.7	72.3	FL 175
045000	4730	12551	137	145	255	40.2	-20.8	-23.4	5330	5488	1034.5	516.7	72.9	FL 175

2342

TAF FRM 0300 10018/25 P6SM SCT250

METAR 0255 10024/30 10SM SCT150 BR250 6/-9 A3054

N42RF AXBT DropSonde Log

42RF Project: _____ Flight ID: _____

Mission: _____ Flight #: 0202254 System Status: _____

[illegible]

(STM

P3 Flight Track Plan

(54.0,-119.0)

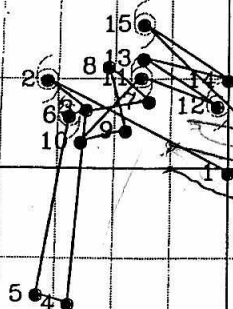
-2 T297
-3 T090
-4 T190
4-5 T270

50

32

4935
12430

120
3000



200

SEA

POR

48.30

110-12930
300 @ 200'

135

130

125

6000-500-1800
310
5080 13048

090

130 48
6000-3500

4945
12912

5042
13212
13418

(40.0,-139.0)

135

130

125

KBHX

NOAA/NSSL Lambert Conformal (47.0,-130.0)

48.5 131.50

PAGE _____ **OF** _____

1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

- PILOT INTENTIONS
- WE HAVE _____ ENDURANCE REMAINING

[illegible]