

Flt ID: 020209H	From: KPDX	To: KPDX
Flt No: 02-027	Blk In: 0659	ATA: ON 0655
ETD: 2359Z	Blk Out: 2356Z	ATD: OFF 0004Z
ETE:	Blk Time: 7.1	Flt Time: 6.9
Sponsor Org: NOAA/ETL	Program: PACJET - OCEAN WINDS	Purpose: IOP 4

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

Name (Last, First)	Activity on Aircraft	Affiliation
PERSSON, O ✓ (-)	PI	NOAA/ETL/CIRES
JORGENSEN, D ✓	RADAR	NOAA/NSSL
SCHNEIDER, B ✓	SAT. COMMS	NOAA/NWS
MERCER, DANNY ✓	DBS	NOAA/NWS
ZHANG, A ✓	SFMR/CSCAT	UMASS
ESTEBAN, D ✓	SFMR/CSCAT	UMASS

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

001420 Bal DPI
001635 Bal DP3
001815 Bal DPI
002540 Bal DPI - NO ADJUSTMENT TO DPI IN BAL MODE

Fit ID: 020209H	Time Off: 0004Z	Time On: 0655Z
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Pressure	1032.3	30.52	30.42	1029.0
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	Number	Data Disposition / Date / Quality
Fit Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes	1	
Video Tapes	4	
AXBT		
AXCP		
AXCTD		
Dropsondes	Ø	

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

Remarks

Pacjet Ocean Winds 2002

Flight #4 020209H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
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: 0004Z
Land: 0655Z

There were no data gaps during the flight.

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (000101 - 001400) and landing (063900 - 065800).

There was a spike in Total Temperature #1 that was removed and patched from 001500 - 001515.

There were balancing spikes in Dew Pointer #1 that were removed and patched using Dew Pointer #3 (001401 - 001600, 001730 - 002030, 002431 - 002730, 003331 - 003630).

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.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1032.3	1029.0
Corrected tower pressure	1033.5	1030.1

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

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
002700	4553	12417			@ P1	Spiral	↓ 1000'							
003745	4558	12439	278	278	129	14.5	10.3	-4.6	170	297	1029.0	993.0	82.3	CI ABV
004700	4603	12531	278	278	158	25.0	8.8	-5.8	172	293	1028.5	992.7	88.0	CI ABV
005600	4610	12620			Begin	porpoise	to	200	-5000-1000					
005745	4612	12629			200'	-Begin	↑ to	5000						
010215	4622	12652			5000'	↓ to	1000'							
011150	4641	12735	299	293	184	35.0	7.0	5.1	204	298	1025.3	988.9	83.6	OVC
012150	4700	12821			Begin	porpoise	200	-5000-1000						
012300	4703	12829			Touch	200'	Climb	to	5000	@ 1000 fpm				
012715	4711	12849			Touch	5000'	↓ to	1000'						
013300	4722	12916	301	291	187	43.8	7.5	8.2	225	291	1021.9	986.6	76.2	CL0405
014900	4750	13029	300	292	216	32.0	7.4	5.5	226	279	1020.2	986.5	79.3	
015155	4756	13045			213	35.6	6.2	3.1			1019.9	955.7	76.7	Spiral to 6000 RA at P2
021530	4745	12927			@ P3	Turn	to	P4						
022340	4819	12912	@ P4	Turn	to	P5								
022535	4820	12903	100	110	198	40.2	7.3	8.3	249	317	1021.9	983.9	83.5	
024000	4801	12727			@ P5	Spiral	↑ to	6000'						
024900	4807	12726			Touch	6000'	Then	↓ to	500					
030910	4829	12840			@ P6	Spiral	↑ to	6000'						
031915	4828	12836	107	118	221	36.9	4.5	5.5	842	913	1023.5	916.4	76.0	
033320	4809	12725			@ P7	Descent	to	2000	and	TRK	to	P8		
033450	4810	12731	291	283	203	37.0	7.0	7.6	525	611	1024.2	952.5	79.8	2000 RA TRK to P8
0350	4825	12845			@ P8	↓ to	1000'	and	TRK	110				
035400	4821	12830			Turn	to	TRK 180	to	P9					
035730	4811	12830	179	181	191	35.6	7.1	7.9	221	294	1022.7	986.9	71.7	1000 RA
042530	4725	12729	101	110	191	30.6	6.5	6.6	219	311	1025.1	987.1	71.3	
042804	4723	12716			↓ to	touch	500'							
043001	4722	12707			@ P9	Spiral	up to	6000'	Then	↓ to	3000	and	TRK 295	
044210	4727	12724	291	284	211	28.4	6.5	6.9	802	894	1025.0	920.5	70.1	3000 RA
045400	4742	12826			@ P11	Spiral	up to	6000'	Then	↓ to	500	to	TRK 107	
051510	4739	12717	107	115	172	29.6	7.4	6.1	064	160	1025.1	1005.5	71.4	500 RA
053330	4758	12808			@ P13	↓ to	750'	and	TRK 112	to	P15			
061346	4708	12506	114	119	159	22.3	9.2	-2.4	113	227	1027.5	999.8	74.0	750 RA
06455	4706	12500			Climb	for	COMMS	END	SCIENCE					

230.

11014 6 VIS SCT 100 BKN 200

12012 10 VIS BKN 200 9/1 A 3042

1030.1

020209H

TT# 1

DP# 1

Takeoff: 0004

INE# 2

Land: 0655

AZI# 2

RA 232 subbed for RA159

Takeoff: 000100 - 001400 ✓

Landing 063900 - 065800 ✓

DPI Bal spikes

001400 - 001600, 001731 - 002030, 002431 - 002730, 003331 - 003630 ✓
DP3 → DPI 1) DP3 → DPI ✓ DP3 → DPI ✓ DP3 → DPI ✓
2) remove spike

TT1 Spike

001500 - 001515 ✓
TT2 → TT1 0.0 offset

RENAV(OVER)

1) 002000	0.0	0.0	45 44.8	123 35.7	✓
003500	0.0	-0.1	45 55.8	124 22.3	✓
011000	0.2	0.1	46 37.8	127 25.8	✓
015600	0.3	-0.1	47 59.1	130 43.7	✓
5) 023900	0.6	0.2	48 11.1	127 52.2	✓
032000	0.7	0.1	48 26.8	128 33.5	✓
040100	1.0	0.0	48 1.4	128 29.6	✓
044400	1.1	-0.1	47 29.5	127 36.4	✓
052600	1.3	-0.2	47 47.5	127 36.9	✓
10) 061200	1.6	-0.1	47 10.6	125 14.1	✓
063600	1.6	-0.4	46 16.1	123 34.4	✓
12) 065800	2.2	-0.7	45 35.2	122 34.8	✓

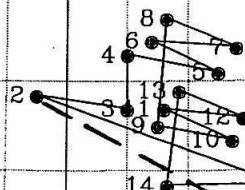
P3 Flight Track Plan

(51.0,-120.0)

50

T100 PG
T295 P7
T107 P8
T288 P9
T193 P11
T295 P12
T097 P13
T292 P14
T112 P15

129.4



46°18'N
126°15'W

15

16

POR

1285

KBHX

CZD

BBY

KDAX

SFO

KMUJX

MRY

(37.0,-139.0)

NOAA/NSSL Lambert Conformal (44.0,-130.0)

