

Flt ID: 010417 I	From: KMCF	To: KMCF
Flt No: 01-33	Blk In: 1628	ATA: 1619Z
ETD: 1400 Z	Blk Out: 1358Z	ATD: 1413 Z
ETE: 2+30	Blk Time: 2+30 2.5	Flt Time: 2+06 2.1
Sponsor Org: NOAA/ETC	Program: PACJET	Purpose: WIND CAL FLIGHT

AOC Personnel

AC: KENUL, P	Sys Eng: ROLES, J
CP: HALVERSON, H	Data Sys: LYNCH, T
Nav: NEWMAN, C	Radar: MCNAMARA, R
FE: WADE, S	GPS/BT:
FD: SITEPIERD, T	Cld Phys:
Avionics:	CURRY, J

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation

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

144315 B2 DP2

1448 DP2 Cloud mode

1451 SWAP APN 154's

1.6 PPJ
0.9 PCD

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

AOCWF2

Flt ID:

010417I

Time Off:

1413Z

Time On:

1619Z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1017.1

30.05

1017.6

30.06

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

Radar Tapes

Cloud Physics Tapes

Video Tapes

AXBt

AXCP

AXCTD

Dropsondes

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

Pacjet Calibration Flight

Flight #17 010417I

<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)	APN-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3012.CON

Notes:

Takeoff: 1413Z

Land: 1619Z

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during take off and landing (141001-141930 take off; 160630-161900 landing). No offset was applied.

A spike was removed and patched in the APN-159 data (141900-142000).

The APN-159 was replaced by the GPS altimeter while the APN-159 was being switched out during flight (145050-145537). A +13.0 meter offset was applied.

Note: During the first part of the flight, a high altitude leg was performed for dew point calibration. The wind "L's" began at 150750Z.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1017.1 mb	1017.6 mb
Corrected tower pressure	1017.6 mb	1017.9 mb

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.

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

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	W ₂ T _d	Press: Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
142555	2748	8251	255	258	270	37	-5.4	-32.4	4676	4907	1018.0	586.6	70.8	Buck -32
142915	2745	8304	254	258	272	36.6	-8.1	-35.3	4878	5079	1017.5	549.0	79.3	Buck -31.8
144440	2745	8412	271	274	281	38.4	-7.6	-40.2	4876	5079	1017.0	549.3	73.5	Buck -37.3 ^{LVL 160}
144830	2743	8434	Reverse Track											
145220	2740	8423	091	091	279	38.4	-7.7	-40.0	4874	6294	—	549.4	71.8	CHANGING APRN 159 1/2
145635	2740	8358	DESCEND to 3500'											
150430	2740	8314	Turn to TRK 315											
150628	2744	8317	321											
150750	2748	8321	317	319	323	16.8	14.2	2.8	1008	1084	1019.5	897.8	76.5	LEG 1 into wind 3500 RA
151300	2801	8335	Turning to TRK 138											
151430	2802	8331	138	140	327	22.7	14.0	3.9	1009	1085	1019.6	897.8	72.5	BEGIN LEG 2
151805	2752	8321	140	140	327	20.2	13.8	5.6	1007	1083	1019.4	898.1	74.2	
151930	2747	8316	Turn (R) TO TRK 230											
152040	2743	8318	230	236	318	15.5	14.7	0.4	1007	1083	1019.3	898.0	72.6	BEGIN LEG 3 3500 FT
152300	2738	8325	231	236	315	13.4	14.7	0.3	1007	1082	1019.3	898.0	72.5	
152520	2733	8333	231	236	321	13.7	14.5	1.9	1006	1083	1019.4	898.0	72.5	
152600	2730	8337	Turn to TRK 050											
152750	2733	8337	057	048	317	14.4	14.6	1.0	1007	1084	1019.3	898.0	70.6	BEGIN LEG 4 3500 FT
153000	2738	8330	051	048	309	14.8	14.9	-0.0	1007	1084	1019.1	898.0	72.6	3500'
153250	2744	8321	052	048	318	17.5	14.5	1.1	1010	1087	1019.3	898	69.8	END LEG 4, 3500 FT
153730	2750	8323	331	332	326	11.1	21.2	12.0	114	155	1017.8	999.7	67.7	BEGIN LEG 1 550 FT
154000	2757	8327	331	332	318	10.5	21.2	11.4	116	158	1017.7	999.4	74.4	550 FT
154300	2806	8333	Turn (R) TO TRK 150											
154440	2806	8329	151	153	313	10.3	21.1	12.5	115	156	1017.8	999.6	75.8	BEGIN LEG 2 550 FT RA
154625	2800	8326	151	153	316	11.0	21.3	11.6	115	157	1017.7	999.6	75.7	550 FT RA
154900	2751	8320	152	153	323	11.9	21.2	11.7	115	155	1017.5	999.7	73.4	
154950	2748	8318	Turn (R) TO TRK 240											
155050	2746	8321	240	244	330	12.8	21.3	11.5	113	153	1017.6	999.8	70.0	BEGIN LEG 3 550 FT
155300	2742	8328	240	244	337	11.7	21.1	13.4	113	153	1017.7	999.8	68.4	550 FT
155530	2738	8336	240	244	344	12.2	21.2	12.4	113	155	1017.9	999.2	67.8	
155600	2737	8340	Turn to TRK 060											
155740	2740	8338	060	058	330	11.6	21.3	11.1	114	156	1017.7	999.2	66.4	BEGIN LEG 4 550 FT
160000	2743	8330	060	058	326	11.9	21.2	13.1	114	156	1017.6	999.6	67.7	550 FT
160300	2748	8321	060	058	324	10.8	21.3	11.5	113	155	1017.5	999.5	68.0	END leg 4
160320			Heading TO MCF											

330
 180
 230
 180
 140
 90
 318
 180
 138
 150
 90
 240
 180
 60

Wind Calibration Flight 010417I

AZI 2

INE 2

TT 1

DP 1

ALT APN159

Removed spike and patch APN159
141900-142000

APN159 replaced by GPS altitude with +13 meter offset while APN159
changed out.

145050 - 145537 +13

APN159 replaced by APN232 @ T.O. & landing due to spiking

141001 - 141930

160630 - 161900

RENAV

1)	143000	-0.1	-0.1	27	43.7	-83	7.0	✓
	150000	-0.2	-0.1	27	39.4	-83	39.4	✓
	153000	0.0	-0.1	27	38.0	-83	29.9	✓
	160000	-0.2	+0.2	27	43.6	-83	30.2	✓
	161900	-0.2	-0.0	27	50.6	-82	31.7	✓

Aircraft : N43RF

Project : PacJet '01

Mission : POST PacJet Wind ColSED Crew: Lynch McNamara RolesFlight ID : 0104171Pre-Flight: 1140Take-Off: 14:13Landing: 16:19

System		Pre-Flight	In-Flight	Post-Flight		
NAV	INE #1 <u>0002</u> Aligned to: <u>4</u>	<u>1145</u> ✓ <u>TL</u>		<u>41.1</u>	<u>-0.8</u>	<u>1</u>
	INE #2 <u>0001</u> Aligned to: <u>4</u>	<u>1145</u> ✓ <u>TL</u>		<u>-0.8</u>	<u>-0.1</u>	<u>0</u>
	GPS <u>119</u>	✓ <u>TL</u>		Lat	Long	GS
	Diff GPS	<u>RJM</u>				
RADAR	Nose	<u>gm</u>	<u>⑤</u> <u>6</u>			
	L/F R/T SN: <u>103</u>	<u>NU</u>		Mod Switch Off? <u>—</u>		
	Tail R/T SN: <u>202/102</u>	<u>NU</u>		Mod Switch Off? <u>—</u>		
	MARS Data System	Clean DAT? <u>NU</u>		# DATs: <u>0</u>		
PMS	2DG-C Ch 1/64: <u>/</u>	<u>NI</u>				
	2D-P Mono Ch 1/32: <u>/</u>	<u>↓</u>				
	FSSP Ref VDC:	<u>↓</u>				
	SEA Data System	Clean DAT? <u>NU</u>		# DATs: <u>0</u>		
TEMP	Cal High	Cal Low		Cal High	Cal Low	
	Temp #1 <u>30.0</u>	<u>-20.6</u>	<u>ql</u>			
	Temp #2		<u>gm</u>			
	Temp #3 (Starboard)		<u>NI</u>			
	Dewpoint #1 (General Eastern)		<u>RJM</u>			
	Dewpoint #2 (Edge Tech 137)		<u>RJM</u>			
PRES	Dewpoint #3 (Buck 1011C)		<u>RJM</u> <u>②</u>			
	Attack Angle (AP/DAP)		<u>RJM</u>			
	Slip Angle (BP/DBP)		<u>RJM</u>			
	Differential (PQ1/PQ2/PQ3/PQ4)		<u>RJM</u>			
	Absolute (PS1/PS2)		<u>RJM</u>			
	Radome Transducers	Plugs? <u>gm</u>				
FLTLVL	Cabin Transducer (Station 5)	<u>RJM</u>				
	Apr-159 SN: <u>66024</u>	✓ <u>TL</u>	<u>④</u>	Off? <u>✓</u>	<u>TL</u>	
	Apr-232 SN: <u>1761</u>	✓ <u>TL</u>		Off? <u>✓</u>		
	King Liquid Water	check wire <u>STM</u>				
	J&W Liquid Water	check wire <u>STM</u>				
	Lyman Alpha Hygrometer	Plugs? <u>NI</u>		Plugs?: <u>—</u>		
	Down PRT-5 (SST)	<u>NI</u>				
	Side PRT-5 (CO ²)	<u>NI</u>				
	Up PRT-5	Open? <u>NI</u>		Closed? <u>—</u>		
	RAMS Data System	Clean DAT? <u>NI</u> <u>①</u>		# DATs: <u>2</u>		
MISC	F/D Laptop	<u>gm</u>		Off? <u>✓</u>		
	C.I. Printer	<u>STM/LH</u>				
	ASDL	<u>NU</u>		Off?: <u>—</u>		
	Exterior Walk Around	<u>gm</u>				
	Video <u>⑩</u> L R D	<u>Not Recorded gm</u>		Lens Covers?: <u>✓</u>		
	AXBT Receivers	<u>NU</u>				
	AXBT Sonobouys	#On Board: <u>0</u>	#Dropped:	#Good: <u>—</u>		
	AVAPS	<u>NU</u>				
	GPS Dropsondes	#On Board: <u>0</u>	#Dropped:	#Good: <u>—</u>		
	FCU <u>B C D</u>	✓ <u>TL</u>		UPS Off?: <u>✓</u>		
USER	SatComm			Accelerometers		
	NASA GORE		<u>②</u>	#1 (2 G): <u>8194</u>		
				#2 (2.5 G): <u>6686</u>		
				#3 (3 G): <u>5967</u>		
			#4 (3.5 G): <u>2892</u>			

Please Note any Discrepancies

[illegible]

NOAA • AOC • SED
N43RF DATA STATION LOG

Project : PacJet '01 Mission : Post project cal flight Flight ID : 010417 I
Operators : Lynch
Take Off : 14:13 Landing : 16:19

RAMS DAT 1 On [8/9]: <u>13:55</u>	RAMS DAT 1 Off: <u>16:28</u>	Data : <u>Slow</u> <u>Fast</u> <u>AVAPS</u>
RAMS DAT 2 On [8/9]:	RAMS DAT 2 Off:	Data : Slow Fast AVAPS
RAMS DAT 3 On [8/9]:	RAMS DAT 3 Off:	Data : Slow Fast AVAPS
Printer On: <u>13:55</u>	Printer Off:	Disk Recording : Enabled / Disabled
MARS DAT 1 On [8/9]: <u>—</u>	MARS DAT 1 Off:	CPU Selected : A <u>B</u>
MARS DAT 2 On [8/9]:	MARS DAT 2 Off:	VCR's Used : N L R D
MARS DAT 3 On [8/9]:	MARS DAT 3 Off:	VCR Mode : VHS / S-VHS 2 / 12
PMS DAT 1 On: <u>—</u>	PMS DAT 1 Off:	
PMS DAT 2 On:	PMS DAT 2 Off:	Tapes Given To
PMS DAT 3 On:	PMS DAT 3 Off:	RAMS: <u>Tom S</u>
VCR Tape 1 On: <u>—</u>	VCR Tape 1 Off:	MARS: <u>—</u>
VCR Tape 2 On:	VCR Tape 2 Off:	PMS: <u>—</u>
VCR Tape 3 On:	VCR Tape 3 Off:	VCR: <u>—</u>

CARCAH Tasking

Mission Number : —
Storm Name : —

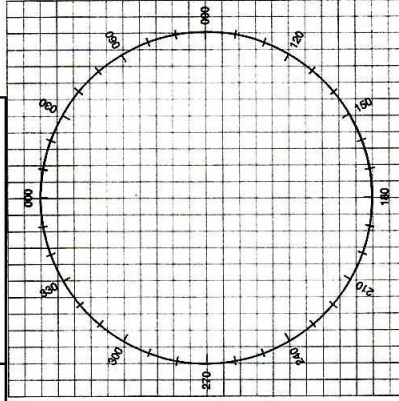
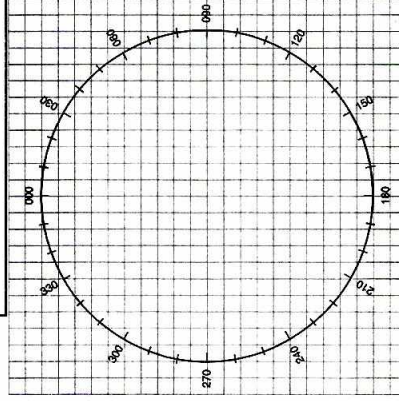
ASDL Setup

Flight Level (Minobs) Sample Frequency : —
Flight Level (Minobs) Block Time : —

Data Station Operator Notes

14:55 - Skipped AFH 232 + 159 to spec units
16:20 - Power Glitch @ engine shift after landing

PAGE OF

[illegible]

POSITION REPORT

1. POSITION 30018
2. TIME 20.06
3. ALTITUDE 154
4. NEXT POSITION
5. ETA
6. NEXT POSITION

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/VOICE	VHF/VOICE	MF/VOICE	HF/CW	MF/CW
243.0	121.5	2182 KHZ	8364 KHZ	500 KHZ

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA , NOAA

- POSITION _____ N/S _____
E/W AT _____ Z _____

- HEADING _____ TRUE/MAG _____
- AT _____ KTS TRUE/INDICATED _____

- FLIGHT LEVEL OR ALTITUDE
- WE ARE A P-3 AIRCRAFT WITH

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE _____ ENDURANCE

[illegible]