

Flt ID: 020425H	From: KMRV	To: KMRV
Flt No: 02-045	Blk In: 0113	ATA: 0108
ETD: 1700	Blk Out: 1720	ATD: 1735
ETE: 8+00	Blk Time: 7.9	Flt Time: 7.6
Sponsor Org: NOAA/AL	Program: ITCT 2K2	Purpose: IOP1

AOC Personnel

AC: TENNESEN, D ✓	Sys Eng: DELGADO, J ✓
CP: HALVERSON, H / SILAH, M	Data Sys: Mc MILLAN, S ✓
Nav: NEWMAN, C ✓	Radar:
FE: FLOYD, D ✓	GPS/BT:
FD: SHEPHERD, T ✓	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
Hübner, G ✓	PI	NOAA/CIRES
NEUMAN, A ✓	Co-PI	↓
BROCK, C ✓		
de Gouw, J ✓		
MARCHBANKS, R ✓		
SULLIVAN, A ✓		
TANNER, D ✓		GA. TECH
RYERSON, T ✓		GA. TECH
		NOAA

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

3455 12029

BL 205512 (time) descending
210700 ascending2468
1735
733904 504 4192
RALLY

20 5512

10 17 3

14
3
42

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

AOCWF2

Flt ID: 020425H	Time Off: 1735	Time On: 0108
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	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1009.0	30.07	1010.5	30.02

	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

ITCT 2k2

Flight #2 020425H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Total Temperature Probe	1
Dew Point Probe	3
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2022.CON

Notes:

Takeoff: 1735Z

Land: 0108Z

There were minor time glitches between 005821 and 010130 with no loss of data. The time glitches were fixed.

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (173201 - 174930) and landing (002530 - 011000).

Dewpointer # 3 was replaced by dewpointer #1 with a 0 °C offset (003004 - 003100).

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1009.0	1010.5
Corrected tower pressure	1018.3	1016.6

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!!

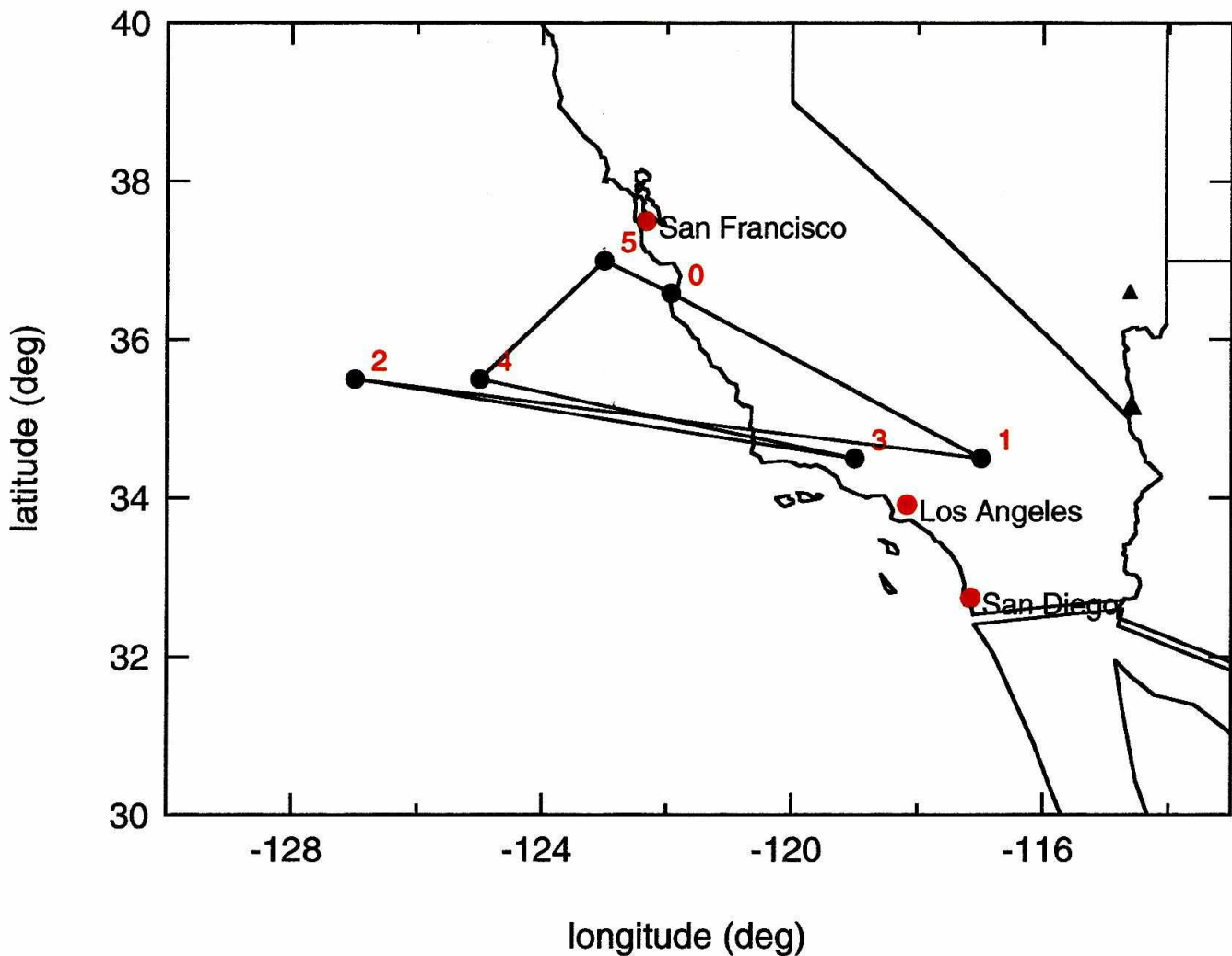
Locations 80, 81, and 82 of record five on the standard tape contain vertical ground, vertical air, and vertical speeds respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

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

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
175030	3621	12117	123	123	094	9.6	-2.4	-20.5	3311	3302	1005.3	673.7	66.3	11K PA 8 VC 260TAS BLO/ABV
180430	3552	12020	122	124	166	5.5	-2.5	-26.1	3312	2911	958.0	673.9	68.9	SCT ABV BLO
183930	3437	11755	098	102	214	14.1	-0.9	-24.4	3326	2585	920.1	672.6	65.0	CLR W/HZ
185146	3429	11657	Spiral descent to 1500' RAB began							①	switched to ② for traffic			
185550	3430	11658	Touch 1500 AGL Begin climb to 16000							TRK 280				
191350	3440	11820	278	274	174	27.0	-12.0	-39.3	4852	3972	904.8	550.9	63.7	16000 PA SCT BLO
194200	3458	12047	279	275	155	27.7								
194445	3500	12104	Descent to 15000 to check lidar											
195210	3505	12143	Climb back to 16000											
200700	3459	12259	279	280	103	22.8	-16.9	-19.4	4860	4911	1019.9	550.4	69.0	SCT BLO CL ABV 16K
202346	3512	12432	281	285	071	30.1	-16.5	-20.5	4859	4917	1020.2	550.5	68.1	
204940	3522	12627	Spiral R to 1000' roll out for 100 then down to 500 on											
—			Track and ↑ to 19000											
210320	3521	12652	Touch 500' then climb to 19000											
212430	3515	12517	094	090	047	29.4	-24.7	-30.3	5945	6015	1024.3	475.5	68.1	BKN BLO FL19 CLR ABV
212715	3514	12502	Descent to 19000											
212810	3513	12458	096	092	050	27.0	-23.7	-27.2	5792	5855	1023.1	485.4	66.3	FL190 OVC BLO
215000	3507	12309	093	094	084	20.0	-23.6	-28.1	5792	5838	1021.2	485.4	70.1	FL190 SCT BLO
223535	3435	11918	108	114	193	29.4	-21.2	-36.4	5792	4718	880.6	485.4	67.4	FL190
224735	3421	11815	Turn to TRK 284											
225000	3419	11821	Climb to FL200 (ATC)											
225215	3421	11834	Turn to 230 for traffic											
225610	3413	11851	TRK 270 for traffic											
230355	3418	11931	Climbing to FL220 on TRK 290											
230700	3422	11946	290	282	200	39.6	-29.8	-42.3	6742	6810	1025.2	426.4	67.1	FL220 CLR SCT BLO ABV
230900	3427	12001	Turn to TRK 305 to avoid RESTRICTED AREA											
232150	3451	12106	284	281	145	24.5	-31.6	-39.1	6734	6784	1029.0	426.2	69.1	FL220
235010	3522	12405	END leg turn to PT 5											
235940	3557	12347	027	032	055	43.5	-36.3	-46.5	7628	7703	1028.8	375.6	66.4	FL250 SCT BLO
001245	3648	12315	028	032	051	34.2	-35.8	-40.0	7627	7724	1030.1	375.6	71.6	
001700	3704	12258	Spiral ↓ at Pt 5											
004030	3657	12303	Ship plume											

0° = 9000 RA BL ~5500

Flight Plan for 25 April 2002 Transect of cut off Low



Pt0 (Monterey) to Pt. 1 at **11 kft MSL**

- ✓ At Pt 1 ^{Spiral} descend to 1500 ft AGL before climb to **16 kft MSL** in route to Pt 2.
 - ✓ At Pt 2 spiral to 500 ft MSL, then climb to **19 kft** in route to Pt. 3.
 - ✓ At Pt 3 climb to **22 kft MSL** in route to Pt. 4.
 - ✓ Pt. 4 climb to **max altitude** in route to Pt. 5 spiral descent at Pt. 5 (time permitting)
- Return to Monterey (Pt. 0)

020425

FLIGHT 173201-011030

TO 1735 LAND 0108

TT #1

TD #3

INE #1

AZI #1

Replace RA159 w/ RA232 - Spiking

173201-174930 Take off ✓

002530-011000 Landing ✓

005281

002291

002106

002016 (2)

002816

002106

005555

000000

000400 (1)

002016 (1)

Time gaps 005821-005830

005851-005900

005921-005930

005951-010000

010021-010030

010051-010100

010121-010130

Spike in DP3

DP3 replaced by DP1 with 0.0 offset

003004-003100

RH > 100% by < 5% a few times

003004-003100

002931
003230

002831
003130

00

RENAV (OVER)

INE #1

1) 181400	-1.1	+0.4	35 31.0	119	42.2	✓
185700	-1.7 -0.7	+0.6	34 ^{31.4} 22.0	117	2.0	✓
193600	-2.7	+1.3	34 53.7	120	14.8	✓
201500	-3.2	+1.3	35 5.6	123	43.8	✓
5) 210300	-4.1	+2.4	35 22.0	126	53.9	✓
213900	-4.3	+2.2	35 10.2	124	3.9	✓
221800	-3.9	+3.7	34 51.7	120	48.9	✓
232300	-3.3	+4.7	34 52.8	121	13.6	✓
000000	-4.3	+5.6	35 58.8	123	46.6	✓
10) 004000	-2.4	+5.3	36 57.2	123	0.2	✓
11) 0110 ⁰⁰ 30	-2.1	+6.8	36 35.4	121	51.3	✓

1271 127

PAGE OF

The image shows two circular diagrams on a grid background. The top diagram is a circle with degree markings from 0 to 360 in 30-degree increments. Inside the circle, the numbers 3367, 1254, and 800.7 are handwritten. An arrow points from the text '800.7' to the number 800.7 inside the circle. The bottom diagram is a similar circle with degree markings from 0 to 360 in 30-degree increments. Inside the circle, the numbers 5696 and 8983 are handwritten. Two arrows point from the text '5696' and '8983' to the numbers inside the circle.

6. NEXT POSITION

- WE HAVE

[illegible]