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

AOC WP-3

Flt ID: 020519H	From: KMRY	To: KBJC
Flt No: 02-56	Blk In: 0142	ATA: 0136
ETD: 1800	Blk Out: 1759	ATD: 1813
ETE: 7+00	Blk Time: 7.6	Flt Time: 7.4
Sponsor Org: NOAA/AL	Program: ITCT 2K2	Purpose: Mission 12

AOC Personnel

AC: TENNESEN, D	Sys Eng: DELGADO, J ✓
CP: HALVERSON, H	Data Sys: McMILLAN, S ✓
Nav: NEWMAN, C ✓	Radar:
FE: BAST, G ✓	GPS/BT:
FD: SHEPHERD, T ✓	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
HUBLER, G ✓	PI	NOAA/CIRES
RYERSON, T ✓	Co-PI	NOAA
NEUMAN, A ✓		NOAA/CIRES
BROCK, C ✓		NOAA/CIRES
SULLIVAN, A ✓		GA. TECH
WARNEKE, C ✓		NOAA/CIRES
ALVAREZ, R ✓		NOAA

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

Bal DP#1 ~1835
DP1 ABOUT 10° warmer than 2 or 3 @ 2118

2492
1759
733

303 271 4875
ATTN: Cole Miller

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

AOCWF2

Flt ID:	Time Off:	Time On:
020519H	1813	0136

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1002.4	29.87	829.2	30.12

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes		
Radar Tapes	6	
Cloud Physics Tapes	CD	
Video Tapes	4	G. Hubler
AXBT		
AXCP		
AXCTD		
Dropsondes		

Video

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

Remarks

ITCT
2k2

Flight #13 020519H

Sensor or system	Number or Name
INE	2
Accelerometer	2
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: 1813Z
Land: 0136Z

There was a time gap from 181540 to 181549.

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (181001 - 181700) and landing 012200 - 013800).

	Takeoff	Landing
Aircraft static pressure	1002.4	829.2
Corrected tower pressure	1011.5	1020.0

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.

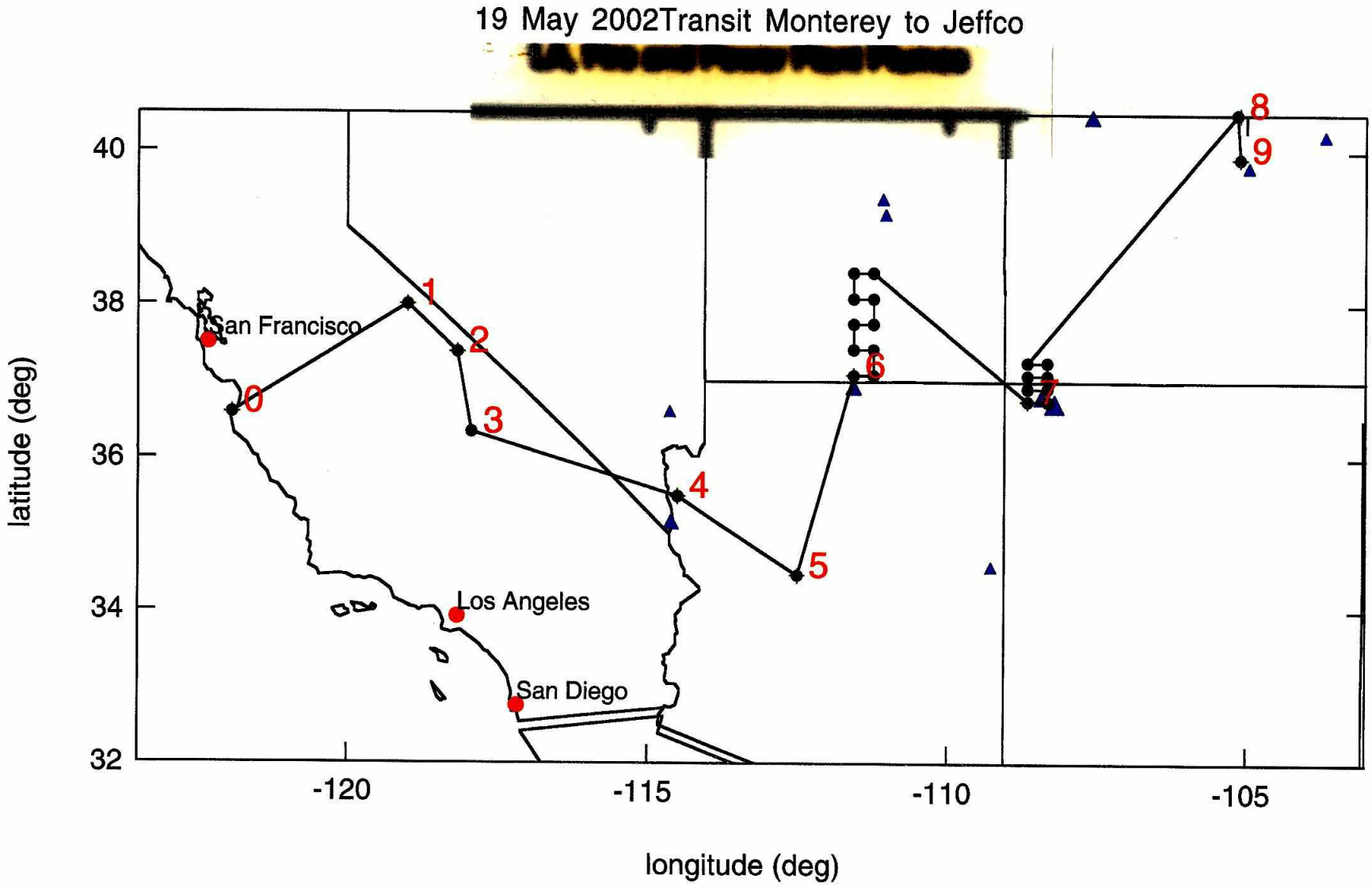
Flight Director: Tom Shepherd, (813) 828-3310 ext. 3053

Flight ID: 020519H

U.S. Dept of Commerce/NOAA/Aircraft Operations Center — Form 47-8

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T_a	T_d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
182740	3644	12055	90	100	204	46.5	-7.0	-23.5	3975	3721	973.4	618.2	75.7	13000 PA
184320	3734	11945	49	59	185	54.9	-10.0	-31.5	4722	2961	804.5	560.5	72.1	15500 PA
185200	3757	11859			181	47.4	Spiral descent over MONO LAKE (Bumpy)							
185900	3804	11901	Spiral at 15000' over MONO LAKE											
190950	3735	11831	132	139	190	33.1	-2.8	-17.2	4093	2441	830.7	610.8	66.2	13500 PA
193020	3625	11802	Touch 500' AGL at Owens LAKE AREA											VERY DUSTY
195020	3555	11639	110	116	185	24.8	3.9	-16.6	3243	2996	946.0	680.2	73.4	DEATH VALLEY 10500 PA
195910	3611	11648	Spiral down then up looking for LA Plume thickness											
200400	3612	11549	Touched 4000' AGL now spiral up to 17500											
202315	3614	11605	Touch 17500 MSL Descend 1500 fpm to 9500											
203320	3558	11606	117	124	192	29.4	7.5	-10.1	2922	2141	916.5	707.9	70.3	9500 PA
210310	3529	11444	Mohave pp plume											
211220	3518	11407	117	123	172	25.4	3.1	-10.5	3723	2581	861.0	632.0	58.5	Climbing to 13500 MSL
213510	3435	11230	96	95	175	20.0	7.8	-14.0	3197	1679	840.0	682.6	65.3	10500 PRESCOTT.
215140	3458	11220	016	019	184	24.7	-0.5	-13.7	4102	2831	855.6	608.1	63.1	
221020	3619	11150	18	018	195	25.6	-4.8	-23.3	4698	3102	824.6	562.8	59.8	OVER GRAND CYN
222840	3705	11128	90	95	223	14.1	24.8	-4.9	1789	459	857.3	814.7	66.7	11500 AGL
224340	3706	11123	91	93	218	7.4	24.0	-6.3	1878	741	859.4	807.9	70.2	~2000 AGL
224930	3706	11110	262	260	225	4.6	20.9	-7.5	2184	864	858.2	776.4	67.9	~3500 AGL
225920	3725	11126	91	95	195	19.5	19.9	-6.9	2288	490	812.7	767.3	62.4	
231520	3708	11125	270	267	213	26.3	18.0	-10.8	2530	1039	836.3	736.1	69.0	
232420	3740	11124	090	096	216	24.3	19.0	-12.5	2336	754	833.4	764.1	70.6	7500 MSL ~2500 AGL
233650	3759	11057	271	265	194	22.4	18.7	-8.5	2455	620	820.1	750.9	64.2	7900 MSL ~2000 AGL
000050	3817	11058	085	091	189	23.6	16.5	-12.0	2679	1334	851.4	729.6	64.4	8700 MSL ~4500 AGL
001940	3833	11209	38	42	198	28.5	-10.0	-28.3	33841	34721	790.6	505.9	64.7	CLIMBING TO FL230 → JEFFCO
002950	3847	11111	675	081	194	30.0	-23.2	-35.7	7042	5599	841.0	408.1	67.9	FL230 → JEFFCO
005300	3913	10843	078	080	212	19.0	-23.1	-24.6	7040	5873	860.1	408.3	62.8	FL238
0050														
010620	3939	10725	061	062	216	7.7	-12.9	-18.4	5812	2744	687.9	484.1	77.5	FL190

4720


19 May 2002Transit Monterey to Jeffco
[redacted]
latitude (deg)
longitude (deg)
40
38
36
34
32
-120
-115
-110
-105
San Francisco
Los Angeles
San Diego
0
1
2
3
4
5
6
7
8
9

020519H

TT # 1

TD # 3

INE/AZI # 2

Pressure Alt.

T.O.: 1813

CANO: 0136

Time gap 181540 - 181549

Replace RA159 W/232

181001 - 181700 T.O.

012200 - 013800 Land

Review (over)

INE 2

1)	184500	0.8	0.6	39.5	37.0 —
	193000	0.9	0.8	25.2	1.8 —
	200500	1.3	0.2	8.6	49.4 —
	205000	1.4	0.5	36.8	50.5 —
5)	212500	2.1	0.2	54.9	12.3 —
	221000	2.3	-0.2	17.8	50.9 —
	230000	2.9	0.1	24.9	22.7 —
	235000	2.9	0.7	2.1	37.7 —
	003000	3.0	-0.3	46.9	10.5 —
10)	011500	3.8	0.1	52.8	33.6 —
11)	013800	4.1	0.4	54.8	7.4 —

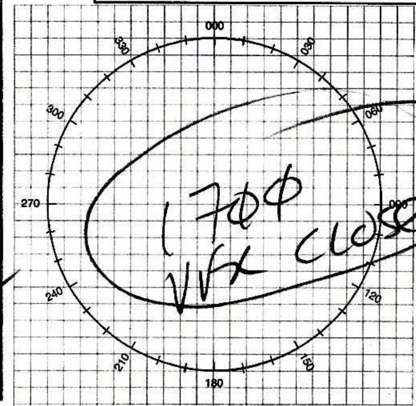
350/8 ↗6 8000 SCT 1400 SCT

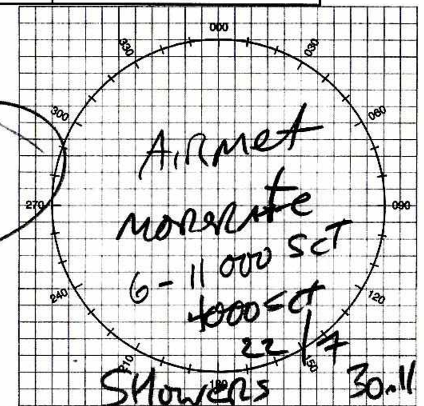
MISSION LOG

PAGE ___ OF ___

CLEARANCES

FREQ	ALT	HDG	OTHER
Red	37 25		171/14
	111 14		133.025
			200/8
			15
			7000 SCT





POSITION REPORT

1. POSITION
2. TIME
3. ALTITUDE
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 ______, 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 ______ SOULS ON BOARD
- NATURE OF EMERGENCY
- ASSISTANCE DESIRED
- PILOT INTENTIONS
- WE HAVE ______ ENDURANCE REMAINING

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
1759	·																				Taxi 49.8 29.87
1813																					TOFF
1925	Δ	36 39.6 118 06.1	36 40.2 118 05.7		36 38.8 118 05.4																
2027	Δ	36 08.5 116 32.1	36 09.1 116 31.9	+.6 +.2	36 07.0 116 32.3	+1.5 -.2			124	9L	115	238	198	36	↘	245					36.6
2211	Δ	36 25.3 111 48.1	36 26.2 111 47.0		36 23.2 111 48.0				18		016	279	190	25	155	252					
2315	Δ	37 07.7 111 24.2	37 07.3 111 24.1		37 04.7 111 24.8																
0115	Δ	39 54.1 105 06.1	39 51.4 106 26.2		39 49.3 106 28.2				084		083	283	220	6	↘	279					
0036																					LAND
0042																					Chock