

Flt ID: 020517H	From: KMRY	To: KMRY
Flt No: 02-55	Blk In: 0148	ATA: 0145
ETD: 1800Z	Blk Out: 1754	ATD: 1809
ETE: 7+00	Blk Time: 7.9	Flt Time: 7.6
Sponsor Org: NOAA/AL	Program: ITCT 2K2	Purpose: IOP11

AOC Personnel

AC: TENNESEN, D ✓	Sys Eng: DELGADO, J ✓
CP: HALVERSON, H / SILAH, M	Data Sys: McMillan, 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
HUBLER, G ✓	PI	NOAA / CIRES
RYERSON, T ✓	C _o PI	NOAA
TANNER, D ✓		GATECH
BROCK, C ✓		NOAA / CIRES
SULLIVAN, A ✓		GATECH
WARNEKE, C ✓		NOAA / CIRES
ALVAREZ, R ✓		
DUNLEA, E ✓	↓	↓

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

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

AOCWR2

Flt ID: 020517H Time Off: 1809 Time On: 0145

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1010.5	30.05	1009.4	29.98

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	T.S.
Radar Tapes	0	
Cloud Physics Tapes	CD	G.H
Video Tapes	4	G.H
AXBT		
AXCP		
AXCTD		
Dropsondes		

Video

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

Remarks

ITCT 2k2

Flight #12 020517H

<u>Sensor or system</u>	<u>Number or Name</u>
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: 1809Z

Land: 0145Z

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (180601 - 180950) and landing (014130 - 014700).

Pitch #2 had a spike that was removed and patched (195720 - 195740).

Roll #2 had a spike that was removed and patched (195720 - 195740).

Dewpointer #3 had a spike that was removed and patched between 215600 and 215700.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1010.5	1009.4
Corrected tower pressure	1016.9	1015.2

The aircraft INE positions were renavigated with respect to GPS.

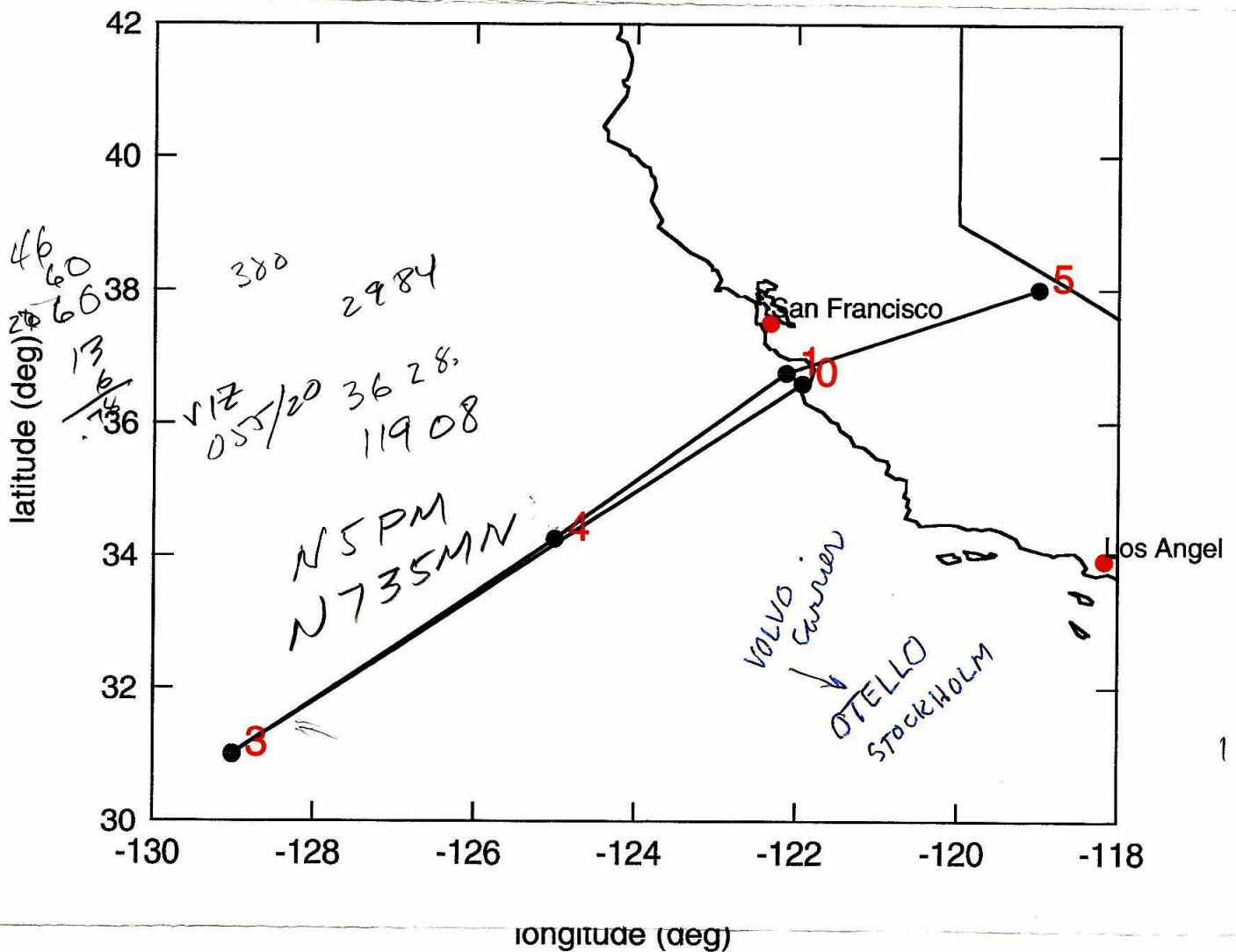
SPECIAL NOTE!!!

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
181800	3650	12141	184	185										MOSS LANDING PLUME
182600	3643	12208	221	227	316	20.0	9.3	7.9	110	135	1016.7	1000.6	77.0	500' RA
183450	3621	12238	239	246	324	19.9	10.0	9.5	114	147	1017.4	999.7	77.1	500'
184650	3551	12318	225	232	336	26.5	11.4	8.7	423	456	1018.1	964.7	68.8	Porpoise thru STRATUS DECK
191315	3443	12443	227	232	011	22.1	13.4	6.8	803	875	1019.6	913.4	72.4	Climbing to 6500
191820	3430	12500	225	227	345	8.2	11.1	-7.8	1987	2086	1016.8	796.1	73.6	6500 PA
193040	3354	12542	224	226	336	7.4	12.3	-24.4	1931	2033	1017.2	801.3	75.5	6300 PA
193710	3336	12603	227	228	271	5.1	6.1	-34.5	3206	3367	1015.3	682.9	74.1	
194910	3300	12646	225	228	267	12.6								Climbing to 13500
195700	3237	12712	225	228	245	13.6								Descending to 11500
200410	3215	12737	222	224	255	13.7	3.3	-27.1	3739↑	3959↑	1015.9	633.2	69.4	Climb back to 13500
200800	3202	12751	227	228	250	12.7	0.2	-28.4	4123	4337	1015.9	606.6	75.6	13500 PA
201920	3127	12830	224	225	241	7.5								Descending to 500'
203210	3049	12911	225	226	19	11.1	13.8	-1.3	62	148	1023.6	1005.9	77.6	500'
203800	3034	12929	225	226	14	12.6	13.4	-5.0	61	147	1023.6	1006.1	74.5	500' Reverse TRACK
204840	3058	12903												Spiral climb to Max altitude
210800	3105	12858	095	046	232	10.7	-11.1	-19.6	5414↓	5653↓	1020.5	518.5↑	67.9	Touched FL180 Descend to 16500
211000	3111	12850	097	047	231	13.7	-7.3	-16.9	5030	5289	1019.0	538.1	71.2	16500 PA
211920	3142	12812	45	46	242	16.0	-6.6↑	-16.1	4915↓	5128↓	1016.9	553.1↑	75.0	Descending to 13500
212230	3152	12759	45	44	247	16.9	0.1	-27.3	4120	4330	1015.8	606.9	77.6	13500 PA
213500	3232	12711												At 9500 Climbing back to 10500
213720	3240	12703	45	41	276	22.5	6.5	-36.5	3194	3355	1014.4	684.7	78.5	10500 PA
213930	3247	12655	44	41	271	19.7	7.8	-35.2	2910	3058	1015.7	709.1	74.0	9500 PA
214250	3257	12643												Begin Descent to 7500'
214500	3303	12635	45	42	285	14.5	10.9	-10.8	2288	2406	1016.2	766.9	76.4	7500'
215230	3324	12609	46	43	309	13.2								Descending to 3500'
215825	3339	12550	47	46	015	10.0	12.9	-24.7	1192	1262	1019.0	878.1	77.6	4200'
220415	3357	12537	014	014	012	11.3	12.4	15.4	989	1055	1018.2	899.9	71.6	3500'
221700	3433	12526	049	045	326	17.1	11.6	10.9	96	148	1019.6	1001.8	80.4	500'
223720	3523	12416	055	053	260	14.6	9.4	-32.7	2662	2774	1012.7	731.8	74.3	8700' PA
224800	3552	12333	050	048	258	22.3	-0.7	-12.5	4101	4281	1013.4	608.3	75.3	13500 PA
225615	3617	12255	060	058	257	32.4	-12.4	-23.2	5488	5740	1020.0	562.0	75.8	Climb DIRECT MONO L.
231000	3653	12139	059	058	245	30.7	-22.8	-33.4	7030	7253	1002.9	408.8	75.7	FL230
232320	3728	12023	059	059	238	28.1	-22.8	-34.8	7029	7173	1004.2	408.9	68.7	FL230 OVR San Joaquin Vall
235000	3803	11856	142	146	245	16.5	16.1	-5.6	2561	710	803.2	735.8	68.6	1500 AGL OVR MONO LAKE

17 May 2002, Alternate Long Range Transport and Ship Plumes



In case of a ship plume study, the trip to Mono Lake
at the end of the flight can be skipped

020517H

TT # 1

TD # 3

T.O.: 1809

INE/AZI # 2

Land: 0145

Pit #2 spike

195732-195735 33-34 miles ✓

Roll #2 spike

195732-195735 ✓

TD3 Spike

215600-215700 ✓

33
60
1980

DBP

1809-1842 OK

Replace RA159 with RA232
180950

180601-~~181100~~ ~~181200~~ 0.0 ✓

014130-014700 0.0 ✓

RENAV(OVER)

INE 2

1)	183500	+0.6	+0.1	3621.3	122 38.1 ✓
	190000	+0.5	0.4	17.6	0.8 ✓
	193000	0.0	0.3	55.9	39.5 ✓
	200000	0.4	-0.1	27.4	22.7 ✓
5)	205000	0.1	0.4	58.4	58.7 ✓
	213500	1.0	0.7	32.3	11.9 ✓
	221500	1.1	1.5	30.0	33.6 ✓
	225000	1.7	1.7	58.4	24.1 ✓
	233500	2.1	2.1	56.2	13.7 ✓
10)	002500	2.4	1.7	26.8	3.8 ✓
	010000	1.9	2.1	14.6	26.9 ✓
12)	014700	1.9	1.9	35.3	50.8 ✓

