

Flt ID: 020429H	From: KMRY	To: KMRY
Flt No: 02-046	Blk In: 2316	ATA: 2312
ETD: 1700	Blk Out: 1701	ATD: 1716
ETE: 6400	Blk Time: 6.3	Flt Time: 5.9
Sponsor Org: NOAA/AL	Program: ITCT 2K2	Purpose: IOP2

AOC Personnel

AC: TENNESEN, D ✓	Sys Eng: ROGERS, M ✓
CP: SILAH, M / HALVERSON, H	Data Sys: McMillan, S ✓
Nav: NEWMAN, C ✓	Radar:
FE: BAST, G	GPS/BT:
FD: SHEPHERD, T ✓	Cld Phys:
Avionics:	AA McFADDEN, J ✓

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
Hübner, G ✓	PI	NOAA/CIRES
Nicks, D ✓	Co-PI	
NOWAK, J ✓		
Brock, C ✓		
ORSINI, D ✓		GATECH
WARNEKE, C ✓		NOAA/CIRES
TANNER, D ✓		GATECH

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

START 2/3 DELAY ON 1/4
 Lyman & on @ 1729

Flt ID: 020429H	Time Off: 1716	Time On: 2311
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	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1012.4	30.07	1013.4	30.10

	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 #3 020429H

<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)	Radar Altitude APN-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2022.CON

Notes:

Takeoff: 1716Z

Land: 2312Z

There were no data gaps during the flight.

The radar altimeter (APN-159) was replaced by the APN-232 due to spiking during takeoff (171301 - 171930) and landing (224530 - 231500).

Dewpointer #3 had four small spikes that were removed and patched in the time intervals: 171800 - 172000, 190000 - 190100, 190430 - 190530, and 192500 - 192700.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1012.4	1013.4
Corrected tower pressure	1018.3	1019.3

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
173355	3649	12303	274	273	254	9.2	-4.6	-8.2	2099	2109	1019.7	785.5	64.9	7000 PA SET BLO
180050	3657	12502	275	275	238	7.4	-5.9	-13.3	2115	2133	1021.4	781.4	65.6	
180240	3658	12511		Begin		↓	TO	2000						
181400	3659	12559		Begin		↓	TO	500						
181648	3659	12610		Touch		500	back up to	2000						
181835	3659	12617		Back		↓	TO	1000'						
182050		12626		Down		TO	800'							
183140	3659	12710	268	272	337	10.2	8.4	5.5	187	240	1020.2	991.1	64.1	800 RA NICE WHALE WATCH ALT
184050				Touch		500	Back up to	1000						
184400	3700	12800		L90	R270									
184815	3700	12757	090	088	322	12.6	3.1	-0.6	841	896	1022.1	916.1	65.5	3000 RA
190440	3700	12644	090	088	313	13.8	2.9	2.2	842	890	1021.4	916.2	66.6	SET @ FL
191435	3700	12600		L90	R270			Climb to	7000					
191810	3700	12602	268	270	310	9.4	-5.3	-7.9	2083	2101	1021.2	786.7	62.8	7000 RA Begin leg
194505	3700	12800		L90	R270			Climb to	10,500					
195015	3700	12801	090	089	308	9.8	-10.7	-22.5	3179	3193	1022.3	685.4	65.6	10500 RA
195540	3700	12735	091	089	307	11.4	-10.6	-19.5	3178	3196	1021.5	685.4	67.0	10500 RA
201200	3700	12612	090	088	310	15.0	-10.3	-22.1	3177	3182	1020.1	685.4	66.5	ALMOST TO END
201425	3700	12600		L90	R270			Climb to	14000					
201950	3700	12558	270	273	007	9.1	-18.4	-29.9	4269	4254	1022.7	595.1	67.0	14000 RA
203700	3700	12725	270	273	002	13.3	-18.6	-30.1	4267	4261	1024.1	595.3	68.1	
204350	3700	12801		L90	R270			Climb to	FL170					
204900	3700	12803	090	085	331	22.8	-24.9	-31.2	5188	5168	1025.8	526.3	67.7	17000 PA
205130	3700	12749		Descend		to	Dryer Layer							
205720	3700	12719	092	090	340	8.4	-24.0	-32.3	4859	4845	1028.5	550.4	66.7	16000 RA
211235	3700	12600		L90	R270			Climb to	FL200					
211950	3701	12603	265	266	302	6.9	-31.4	-52.9	6088	6039	1027.5	466.2	65.2	
214450	3700	12810		L90	R270			Climb to	FL210	TRK TO	37N	123W		
215650	3700	12701	091	088	326	19.2	-33.6	-41.5	6390	6344	1030.0	447.1	66.7	FL210
220540	3700	12607	090	90	277	15.3	-35.5	-53.5	6784	6734	1027.9	420.0	67.1	Climbing TO FL250
222740	3700	12340	089	096	240	71.8	-34.3	-56.7	7618	7559	1004.2	376.1	67.5	FL250
223840	3657	12257		In a spiral descent		to	1000'							
225416	3700	12245		Touch		300 Feet	Climb TO							

020429H

Takeoff: 1716
Land: 2312

TT#1
TD#3
INE#2
AZI#2

roll ✓ POAR pdsf pgr/ PAAF pSF
pitch ✓ PDAF pdsr pgr2 PQSF pSW

Ralt

No reported time gaps

~~State~~

Replace RA159 w/ 232 due to spiking

171301 - 171930 Take off ✓

224530 - 231500 Landing ✓

Spikes DP3

171800 - 172000 = TA 26-55 ✓

190001 - 190100 28-46 ✓

190430 - 190530 16-26

192500 - 192700 16-38

~~1900 - 1910~~

1920 - 1930

190530 - 190630

RENAV / OVER

INEZ

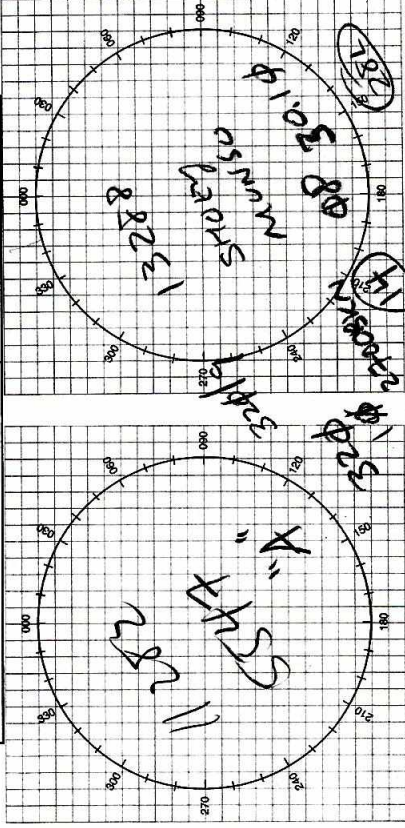
1) 172700	+0.1	0.0	36 46.4	122 31.7	✓
181600	-0.6	+0.6	36 59.1	124 6.0	✓
184700	-0.9	+0.7	37 0.5	128 2.9	✓
191900	-1.0	+1.0	36 59.8	126 5.2	✓
5) 195100	-1.4	+1.4	37 0.1	127 58.1	✓
203000	-1.6 -0.7	+1.5	37 0.1 ^{1.0}	126 49.1	*
211600	-2.2	+2.3	37 7.1	125 47.3	✓
214400	-2.3	+2.2	36 53.9	128 9.6	✓
222700	-2.8	+2.2	37 0.1	123 44.3	✓
10) 230300	-2.4	+3.2	36 43.0	122 13.7	✓
231500	-2.2	+3.0	36 35.5	121 51.1	✓

CLEARANCES

[illegible]

MISSION LOG

PAGE OF



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

- 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 _____

[illegible][illegible]