

19940820 I1 - FDIR

T.S. CHRIS

FLIGHT #01 I940820

TYPE OF DATA

SENSOR OR OPTION

INE	2
Accelerometer	1
Temperature probe	1
Altitude change option (for vertical winds)	RA159
Static pressure	Rosemount fuselage
Dynamic pressure	Rosemount fuselage
Time source	Micro 99
Constants file	CO3943.CON

Notes:

There were a number of short duration time/data gaps:

prior to takeoff til 172700Z

181121Z - 181140Z
181219Z - 181230Z
194601Z - 194610Z
205911Z - 205920Z
000501Z - 000710Z
001931Z - 001940Z
003421Z - 003520Z
004011Z - 004040Z
014711Z - 014720Z
015241Z - 015330Z
015601Z - 015610Z

The fuselage static pressure sensor, PSF, experienced electronic dropouts during the following time frames:

194451Z - 194550Z
201200Z - 201400Z
202930Z - 203130Z
204500Z - 204700Z
205400Z - 205600Z
211600Z - 211800Z
214900Z - 215100Z
220630Z - 220830Z
221500Z - 221800Z
223930Z - 224130Z
224530Z - 224730Z
225030Z - 225230Z
225500Z - 225700Z
230130Z - 230330Z
230930Z - 231130Z
232200Z - 232700Z
232830Z - 233430Z
233800Z - 234100Z
234600Z - 234900Z

235100Z - 235600Z
 000000Z - 000200Z
 000630Z - 000830Z
 001600Z - 001800Z
 002030Z - 002230Z
 002600Z - 002800Z
 003000Z - 003400Z
 003600Z - 003700Z
 003800Z - 004000Z
 004200Z - 004800Z
 005100Z - 005500Z
 005600Z - 005800Z
 010000Z - 010200Z
 010630Z - 011030Z
 012200Z - 012400Z
 020600Z - 021000Z
 021730Z - 021930Z
 022400Z - 022600Z
 023200Z - 023700Z
 024500Z - 024700Z
 032630Z - 032800Z

All of these dropouts were removed and patched.

The fuselage dynamic pressure sensor, PQF1, experienced electronic dropouts during the following time frames:

1809Z - 1811Z
 1821Z - 1823Z
 0218Z - 0219Z
 0221Z - 0226Z
 0236Z - 0241Z

These dropouts were removed and patched.

The APN159 radar altimeter experienced some problems during the period 015231Z - 032430Z, so its values were replaced with those from the GPS altimeter.

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.

	Take off -----	Landing -----
Aircraft static pressure	1015.5mb	1016.1mb
Corrected tower pressure	1015.6mb	1016.6mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: F940820	FM: SJU	TO: SJU
FLT NO: 94-023	BLK IN: 0338	ATA: 0331Z
ETD: 1600Z	BLK OUT: 1716Z	ATD: 1724Z
ETE:	BLK TIME: 10:22	FLT TIME: 10:07
SPONSOR ORG: HRD	PROGRAM: HURRICANE RESEARCH	PURPOSE: T.S. CHRIS

OAO PERSONNEL

AC McKinn	SYS ENG LYNCH
CP KENNEDY	DATA SYS PRADAS-BERNEZ
NAV RATHBUN	RADAR BARR
FE BAST	BT/ODW
RADIO SAN SOUCT	CLD PHYS MCNAMARA
FD DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Willoughby	PF	HRD HRD
Burpee	PF	USDC under secretary
Griffin		
Franklin	RSI LT	
Aberson	RADAR	
Samsun	RADAR	
Borham	VIP	

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PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

T/O delayed because of: (1) Getting fueled late
 (2) ODW system being replaced
 (3) VIP arriving late.

181130Z minor system glitch

EYE FIX at 1947Z FROM 500MB 25°25'N 60°23'W

DECIDED TO CANCEL N42RF'S FLIGHT at 2100Z

TT2 FROZE UP 0012Z

TT1 & TT2 0015Z

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2 FILE

FLT ID: I940820

TIME OFF: 1724Z

TIME ON: 0331Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1015.5	29.99 / 1015.6	1016.1	30.02 / 1016.6

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

1

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

4

HARD COPIES

AXBT

AXCP

ODW

7

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME		
CAPT MCKIM	LT RATAUN	N43	94-23	1723	SAN JUAN R/R	20AUG94	T.S. CHRIS		
TIME OF ENTRY	POSITION GPS	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS
1712									ENG START
1716									TAXI
1723									TAKEOFF FUEL 57.6K
	2039.0		2037.2	+1.8	2037.0	+2.0	180	073	
1809	6436.3		6436.4	-1.1	6435.9	+1.4	295	070	
	2120.2		2118.0	+2.2	2117.6	+2.6	180	054	
1833	6235.1		6235.7	-1.6	6234.5	+1.6	309	051	DROPSONDE #1
	2254.7		2254.7	0	2253.7	+1.0	180	059	
1902	6033.2		6034.1	-1.9	6032.3	+1.9	299	055	
	2431.2		2429.3	+1.9	2427.8	+3.4	180	311	
1928	5918.8		5920.2	-1.4	5918.2	+1.6	286	313	CORRECTION TO CENTER
	2532.9		2529.4	+3.5	2527.8	+5.1	180	030	? CENTER 2525N
1947	6025.6		6030.2	-1.6	6027.8	+1.8	267	031	6023W DROPSONDE #2
	2705.9		2704.3	+1.6	2702.1	+3.8	180	045	
2011	5926.0		5927.3	-1.3	5924.6	+1.4	302	042	
	2904.3		2902.5	+1.8	2900.0	+4.3	180	261	
2041	5806.8		5808.3	-1.5	5805.1	+1.7	306	262	DROPSONDE #3
	2906.6		2902.2	+4.4	2859.5	+7.1	180	267	
2113	6108.7		6111.4	-2.7	6108.0	+1.7	302	270	
	2855.7		2853.1	+2.6	2849.9	+5.8	180	148	
2131	6238.5		6240.2	-1.8	6237.3	+1.2	251	149	DROPSONDE #4
	2610.3		2605.6	+4.7	2602.1	+8.2	180	124	
2224	5956.7		6000.4	-3.4	5957.0	-1.3	300	121	
	2437.8		2435.2	+2.6	2430.4	+7.4	180	128	
2302	5709.5		5712.5	-3.0	5709.7	-1.2	282	122	
ATC CLEARANCE: 0320 19K TEAL 07 2347 25									
2730 2645 6030 6002 5833									
ENROUTE CLEARANCES: 212 26.4N 330/15 24.8 54.7 192									
2525									
6023									
TYPE OF FIX: (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER - INERTIAL									
(8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL									
442 1440									

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FLIGHT PLAN

PROPOSED T.O.

ACTUAL T.O.

WAY POINT	TO	RTE	ALT	TAS	TC	W DC	V	TH	VAR	MH	GS	ZONE DIST	TOTAL DIST	ZONE TIME TOTAL TIME	PROPOSED ETA	ETA ATA
1	18 26.3 N 66 00.6 W SAN JUAN				048								258 297			
3	21 17 N 62 35 W				048							297	555 250			
4	25 25 N 60 23 W				028							250	805			
5	29 N 58 W	-1 +1			090											
6	29 05 N 62 45 W	-2 +2														
3	26 10.3 N 59 56.7 W	-4 +3														
L	24 N 56 W											147			2353	
	27 N 56 W	-4 +5										428			0146 0131	0138
	27 N 65 W	-4 +4			190							513			0248 0315	0300
	27 N 65 W															
	27 N 65 W															
	2330 6548 GRANN	-4 +3														
	2008 6613 VERMONT															
	1823.3 6624.7 COLORADO															
	1826.3 66 40.6 SAN JUAN															
	1863.9 66 00 76 RWY 8 GPS 4															
	SAN JUAN 18221.9 66 40.7 BERMUDA GPS 5															

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERRORS		
				ELAPSE ALIGN POST TIME					LAT	LONG	GS
INS 1	1415 Z				0	1711	0331	10120	+4.7	-4.6	8
INS 2 IMU	1415 Z				5	1711	0331	10120	+7.0	-2.5	5

ALIGN REMARKS:

OTHER REMARKS:

 2731
1711
1020

 195.2
78.8
116.2

 29
57.3

I940820

TIME	LAT	LONG	TRK	HD	WD	WS	PA	GA	TA	TD	SP	PS		PQ
173200	18 50	6602	349	350	148	13	5330	2489	11.8	2.6	1016.3	755.0	CLR	57.2
175100	2005	6605	71	74	198	15	5517	5848	-4.5	-17.4	1009.1	504.2	CLD BLW	65.8
181100	2040	6428	70	73	205	17	5519	5845	-4.3	-19.4	1008.6	503.9	SCD CLD	73.0
182500	2103	6318	70	74	204	24	5594	5928	-5.2	-19.9	1009.7	498.6	CLD BLW	73.2
183340	2118	6234	51	54	201	27	5593	5925	-5.2	-20.2	1009.7	498.7	Good ODW	74.2
184800	2204	6133	48	51	201	29	5592	5927	-5.5	-20.0	1011.1	498.8	CLD BLW	73.5
190500	2301	6021	56	58	195	18	5592	5930	-6.9	-14.4	1014.0	498.9	CLD BLW	73.0
193600	2449	5949	302	299	209	18	5591	5922	-7.5	-15.3	1014.6	498.9	CLD	71.5
194700	2525	6023		EYE at 500 MB										
202600	2800	5836	30	35	159	27	5589	5921	-7.7	-9.0	1014.7	499.1	CLD	71.3
204134	2900	5808	262	261	96	27	5600	5955	-8.0	-9.7	1017.5	498.3	Good ODW	69.7
210700	2900	6034	270	269	102	29	5601	5944	-7.0	-11.6	1014.5	498.1	CLD	72.4
213124	2848	6236	158	155	129	30	5600	5936	-8.6	-9.5	1017.4	498.2	Good ODW	71.6
215400	2723	6212	120	122	172	12	5600	5933	-8.2	-10.0	1015.9	498.3	CLD BLW	69.9
220900	2648	6104	120	120	335	5	5600	5936	-6.7	-13.1	1012.9	498.4	CLDS	66.7
223100	2546	5927	120	126	239	30	5599	5940	-7.9	-8.0	1016.2	498.5	CLDS	69.5
230910	2412	5638	121	126	212	22	5599	5973	-6.6	-21.5	1017.5	498.3	CLD BLW	73.3
232000	2406	5600	357	357	182	9	5599	5974	-7.1	-21.5	1019.2	498.3	DARK	73.3
234500	2608	5600	0	2	151	17	5600	5979	-8.4	-13.1	1022.2	498.3	DARK	73.0
235347	2648	5606	276	273	171	17	5600	5977	-8.0	-15.4	1021.3	498.3	Good ODW	70.1
001100	2704	5734	289	281	190	38	5600	5960	-7.4	-7.9	1016.3	498.4	TS	73.1
001915	2710	5816	255	247	193	45	5599	5954	-6.7	-22.1	1016.3	498.4	Good ODW	74.0
004200	2654	6002	284	282	259	30	5599	5951	-8.4	-11.9	1019.6	498.2	TS	69.6
005335	2655	6102	266	266	208	4	5599	5950	-7.0	-12.4	1015.3	498.3	RAID ODW	71.0
010900	2650	6219	270	269	235	14	5599	5947	-6.6	-18.7	1014.7	498.3	DARK	70.6
011137	2650	6233	270	269	256	14	5601	5946	-6.9	18.3	1015.2	498.4	Good ODW	70.4
014500	2605	6437	189	192	213	26	6903	7316	-17.8	-28.5	1020.8	416.3	CLR	71.5
027000	2333	6543	205	206	218	14	6743	7202	-16.7	-28.1	1027.0	425.7	CLR	74.0
024200	2148	6552	184	186	214	22	6742	7202	-15.2	-27.4	1022.2	425.8	CLR	72.8
031200	1927	6600	183	186	215	29	6740	7201	-13.6	-25.1	1016.7	425.8	CLR	73.6