

1790830HL FDIR

1

RFC-1 WORK FORM (7-76) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FACILITIES CENTER MIAMI, FLORIDA		AIRCRAFT N422F	
FLIGHT LOG		FLIGHT NO. 117-79	
		FLIGHT ID 790830H	
		DATE AUG. 30, 79	
TAKE OFF (City or airport) SJU		LAND (City or airport) SJU	
ALTITUDE 1500'			
PURPOSE NHEML-RESEARCH-HURRICANE DAVID			
PROPOSED TAKEOFF TIME: 1230Z		PROPOSED FLIGHT DURATION: 10HRS	
TIME IN: 2140Z		TIME ON: 2135Z	
TIME OUT: 1230Z		TIME OFF: 1240Z	
BLK. TIME: 9:10HRS		FLIGHT TIME: 8:55HRS	
FLIGHT PERSONNEL			
OPERATIONS CREW		SCIENTIFIC CREW	
VISITORS			
WERLEY		DAVIS	
GEUPLINGER		CONNOR	
ADAMS		SIMS	
CORNELL		LAMBRECHT	
			BLAIR
			GROSS
			STEWART
			FARRIND
			ELIOT
PROPOSED MISSION			
AT 1500' PT1 → 2 → 3 → 4 → 5 → 2 → 5 → 2 → 1 AND REPEAT			
ACTUAL MISSION AND REMARKS			
FIRST PENET FM ~ PT3 TO 2 TO 1 AT 1500' TURBC DICTATED CLIMB TO 5K - AT 5K PT1 → 2 → 3 → 2 → 4 → 2 → 5 → 2 → 1 → 2 (1 PATTERN) AT 5K PT1 → 2 → 3 → 2 (TURBC CRASHED SYSTEM ON ENTRY) → 4 → 1 → 5 → 2 → 1 → 5 → 554 SYSTEM MOSTLY INOP AFTER 1815Z			
ONE INOP TRA INTMT MALF (CORRECTED)			
DATA COLLECTED AND REMARKS			
1 STD FLT LVL DATA TAPE; RADAR TAPE; CLO PHY TAPE 8 PENETRATIONS; HI WINDS 1030/82MPS; LOW PRES 931MB; 10 RECCOS WITH THREE FIXES USE INFO TEMP 1, SAT + SAS = 6.0			
OVER			

1

1457
25
1030

790830H

TIME	TK	LA	LO	RA	PA	TA	TD	WD	WS	SP	HT
1718	010	1558	6643	1707	1714	12	14	260	11	1000	1433
		DIA 25	CLOSED								
		1630	6622	MAX	50			290	58		
1738	410	1559	6619	1684	66720	19		270	22	931	831
		TMP 24°	17°	TD 14°	15°			DV-580	850	810m	
		85	14	MAX	NG			110	77		
1738	6	5	16035	N 66°	111°	W					
1804	190	1766	6612	1663	6688	16	16	680	37	999	1417
		DIA 25	CLOSED								
181520		89	26					100	82		
		SYE	OUT	TURBO?							
1820	7	5	16038'	66012'							
1845	PTRN CHANGED TO —			PT1	80 NM 280° FM 5						
				PT2	80 NM 190° FM 5						
				PT3	80 NM 100° FM 5						
				PT4	5						
				PT5	80 NM 190° FM 5						
2015		1677	6668	1641	224	20	19	170	05	930	830
		8	5	1646'	66091'						

790830H

TIME	TK	LA	LO	RA	PA	TA	TD	WD	WS	SP	
1230											
123914											
1304	198	17 53 DIA 18	65 41	573	630	21	19	065	30	1001	
1310	160	17 08	65 46	422	670	22	21	055	32	999	925 34
1322		16 27	65 41					142/4			
		16 24	65 40					270/12			
		max WIND 090/62, 15 @									
1322	15	16°25'N	65 25				04-650				225
							5 @ 290/62				
1330	SYS DN										
1340	194	15 44	65 63	631	716	22	19	260	26	999	
1354	AT	PT 4 WDG IN									
1400	010	15 48	65 68	1637	1666	16	16	265	21	999	
				10 DIA OPENSE							
				30 DIA CLOSED							
1406	010	15 51	65 61	1611	1714	17	16	270	30	990	
1412		16 41	65 55	1483	2061			112	10		
		max 56 280/52 TNP 16-23									
1413	25	16°24'N	65 36°								
		max N @ 110/75 020/20 NM									
1430	010	17 48	65 32	1665	1670	16	16	095	35	1441	100/70
1457		16 44	65 72	1637	2174	22	20	275	02	932	
		max W 180/77 920 m									
		16° OUT 310 IN max W @ 020/70									
1457	35	16°27'N	65°50'W								
1545	RADAR OUT										
1600	100	16 51	66 53	1651	1703	18	16	020	80	1340	010/75 m/s
1609		16 50	65 92	1622	2197	20	20	090	64	831	932
		SLP 932 TNP 18-21 max W @ 010/62 m/s									
		min 850 835									
1609	A	5	16°27'N	65°57'W							
		max EQ 200/72									
1630	105	16 21	64 68	1652	1652	17	13	172	25	1456	120/55 kts
1640	285	16 36	65 16	1615	1655	17	14	178	35	1405	
1650	290	16 50	65 81	1561	2051	20	18	190	69	960	947
		DIA 25 4 10									
1652		16 58	66 03	1681	2208	20	19	090	10	932	838
		16 54	66 12					345	22		
1652	S	5	16°33'N	66°03'W							
		max EQ 1900/69 m/s max SE 290°/52 m									
		min PRES 932 850 HT 830 m TNP 22°2208 m 17° 1650 m									

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
160932			16-31.4 65-56.4		16-30.5 65-56.7		G Use 16-32 66-07
163008			16-13.7 64-40.2		16-12.9 64-40.3		East end
165220			16-37.2 66-03.4		16-35.2 66-03.2		G 16- 35 34 use 66- 03 11
171345			15-15.0 66-21.4		15-12.4 66-21.4		South end
17—			——		——		G Use 16-37 Use 66-18w
175824			17-54.9 65-57.1		17-52.5 65-57.0		North end
181946			16-41.1 66-17.0		16-37.8 66-17.9		G
184026			16-53.2 67-41.1		16-49.8 67-42.1		West end? Big Bumps?
192728			15-23.8 66-37.7		15-20.5 66-38.8		
194911			16-20.6 65-17.0		16-16.8 65-18.3		
201522			16-46.7 66 -40.3		16-43.2 66 -40.9		G
203454			15-28.7 66-53.9		15-25.0 66-55.1		
210054			16-39.6 65-21.9		16-35.8 65-23.5		End mission
212842			18-28.5 66-05.2		18-24.5 66-06.3		land - 068/8 STU V7
213245	18-24.6 66-00.5		18-31.3 65-58.6	-5.3 +1.9	18-27.4 65-59.6	-.8 +.9	Block in land
213831	18-26.5 66-00.5		18-31.2 66-58.7	-4.7 +1.8	18-27.2 66-59.8	-.7 +.7	Block in
							if wind increases corr Rt if wd decreases " Lt

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION STU	DATE	PROJ. NAME
Wexley FOR GENZ	ADAMS	N42RF	790830	12 Z	N 18-26.5 W 66-00.1	30 AUG 79	"DAVID"

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
122844	N 18-26.5 W 66-00.5		N 18-26.5 W 66-00.5	0 0	N 18-26.6 W 66-00.5	-1 0	Block out
123915	N 18-26.7 W 66-00.3		N 18-26.9 W 66-00.2	-1.2 1.1	N 18-26.9 W 66-00.2	-1.2 1.1	TOFF
130343			17-31.0 65-24.7		17-31.0 65-24.6		IP
	16-22 65-25						5 H6FG 000100 000100
134419			15-03.2 65-44.5		15-03.6 65-44.2		T61329 Warn 000200 000100 #1 UNCOMPLE
135402			15-07.5 65-44.9		15-07.5 65-44.7		South end R+
141421			16-29.6 65-34.9		16-28.8 65-34.6		5 use 16-29 65-35
143418			17-40.9 65-17.8		17-40.7 65-17.5		North end
143743			17-38.3 65-29.2		17-38.3 65-29.0		North end to 5
145658			16-26.5 65-43.3		16-27.1 65-43.6		5 16-27 determined 65-50 center
151723			16-44.2 67-07.6		16-43.4 67-07.5		West end Loiter for ~25m

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	11:42	✓	✓	—	5	1215	2141	9.4	-4.7	+1.8	2
INS 2 or IMU	11:42	✓	✓	—	5	1215	2141	9.4	-1.7	+1.7	3

ALIGN REMARKS:

OTHER REMARKS:

TYPE OF FIX : (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN
(6) RADAR (7) DOPPLER (8) OMEGA (9) INERTIAL
(10) OMEGA - INERTIAL