

1980080641-FDIR

1

RFC-1 WORK FORM (7-76)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FACILITIES CENTER MIAMI, FLORIDA		AIRCRAFT N42RF	
				FLIGHT NO. 117-80	
				FLIGHT ID 80080614	
				DATE 6 August 80	
TAKE OFF (City or airport) MJSJ		LAND (City or airport) KMIA		ALTITUDE	
PURPOSE Hurricane "Allen"					
PROPOSED TAKEOFF TIME: 1200 Z		PROPOSED FLIGHT DURATION: 8 hrs.			
TIME IN: 1913		TIME ON: 1907			
TIME OUT: 1223 Z		TIME OFF: 1243			
BLK. TIME:		FLIGHT TIME:			
FLIGHT PERSONNEL					
OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
Worley	Correll	Peschke	Zysko	Torres	W. H.
Gonzalez	Rose	Brinson	Lundin	R. B. Bick	Hall
Mandell		DeGroot		Wierfel	Wierfel
Adams		Conner			
PROPOSED MISSION Butterfly page 53 at 1500'					
ACTUAL MISSION AND REMARKS Aborted 1500' after $\approx \frac{1}{2}$ of pattern as turbulence was such that instruments were failing and displays could not be read. Completed mission at 10000'.					
DATA COLLECTED AND REMARKS					

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION MSJU N18-26.4 W66-00.7		DATE 6 AUG '78		PROJ. NAME Allen	
WERLEY		ADAMS		N42RF		800806		1243							
TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION		LAT LON COR'S	POSITION		LAT LON COR'S	REMARKS						
122307	N18-26.4 W66-00.7	4/1	N18-26.3 W66-00.7		+1 0	N18-26.2 W66-00.9		+1.2 -1.2	Blown out						
124243	18-26.6 66-00.4	4/1	18-26.6 66-00.5		0 -1	18-26.2 66-00.8		+1.4 -1.4	Toff						
144736	17-58.4 76-53.6		17-58.4 76-56.8		0 -3.2	17-58.9 76-54.0		-1.5 -1.4	MOT Kingston						
152245						19-38.8 79-10.6			J						
152512			19-39.9 79-14.9		(2)	19-40.9 79-11.7			J						
154511			18-42.0 80-13.0			18-43.1 80-09.9			TK 105						
160448			18-22.5 78-52.4			18-24.1 78-49.0			TK 345 W/V 210/26						
162806			19-44.3 79-35.5			19-46.4 79-32.2			J TK 345						
165142			20-59.1 79-59.5			21-00.6 79-56.3			TK 225 Severa Turbul → 5000						
170517			20-05.1 80-43.4			20-06.3 80-40.4			TK 105						
173218			19-54.2 79-58.1			19-56.3 79-54.7			J						
180736	21-40 78-50		21-39.1 78-52.2		+1.8 -2.2	21-41.0 78-49.4		-1.0 +1.6	MOT Simon VT						
SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE		ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	Δ T (2)(1)	TERMINAL ERROR					
				ELAPSE	ALIGN POST TIME					LAT	LONG	GS			
INS 1	1100	✓	✓	—	—	0	1137	1914	7.6	+1.0	-2.5	3			
INS 2 or IMU	1100	✓	✓	—	—	0	1137	1914	7.6	+1.9	+1.8	2			
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															

[illegible]

6 August 1980 Hurricane "Allen"
 N142 RF SJU site press at 1220Z = 1016 mb

	Time	Lo	Lo	D	S	Ta	Td	Ra	Pa	SST	Ps				
13	4100	18.1	70.7	121	13	-3	-41	5811	5486	19.2	1008				
14	0000	17.9	72.5	146	17	-3	-18	5799	5481	19.8	1005				
14	4200	18.0	76.5	168	17	-1	-9	4377	5469	2					
14	5000	18.1	77.1	180	19	-3	-5	5348	5470	7	947				
15	0000	18.7	78.0	170	25	22	20	520	570	26	1003				
15	0200	18.8	78.1	170	21	22	21	476	553	26	1002		1500		
16	1300	18.9	79.1	197	20	22	22								
16	2000														
18	3000	23.6	79.0	119	16	-5	-5	5805	5436	-2	1015				

DATE		SCHEDULED FIX TIME 1800		AIRCRAFT NUMBER N42 RF		ARWO Rusby	
MANOP HEADING (PRECEDENCE IMMEDIATE)							
MISSION IDENTIFIER AND OBSERVATION NUMBER NORA 42 0902 Allen 0810							
(ABBREVIATED) (DETAILED) VORTEX DATA MESSAGE							
A	06 / 1731			Z	DATE AND TIME OF FIX		
B	19 DEG 55 MIN N S				LATITUDE OF VORTEX FIX *		
	79 DEG 57 MIN E W				LONGITUDE OF VORTEX FIX *		
C	700 MB 2776			M	MINIMUM HEIGHT AT STANDARD LEVEL		
D	NA			KT	ESTIMATE OF MAXIMUM SURFACE WIND OBSERVED		
E	NA DEG NA			NM	BEARING AND RANGE FROM CENTER OF MAXIMUM SURFACE WIND		
F	025 DEG 116			KT	MAXIMUM FLIGHT LEVEL WIND NEAR CENTER		
G	295 DEG 7			NM	BEARING AND RANGE FROM CENTER OF MAXIMUM FLIGHT LEVEL WIND		
H	957			MB	MINIMUM SEA LEVEL PRESSURE COMPUTED FROM DROPSONDE OR EXTRAPOLATED FROM WITHIN 1500 FT OF SEA SURFACE		
I	16 C / 3000			M	MAXIMUM FLIGHT LEVEL TEMP / <u>PRESSURE</u> ALTITUDE OUTSIDE EYE		
J	18 C / 2400			M	MAXIMUM FLIGHT LEVEL TEMP / <u>PRESSURE</u> ALTITUDE INSIDE EYE		
K	12 C / 240			C	DEWPOINT TEMP / SEA SURFACE TEMP INSIDE EYE		
L	open SE				EYE CHARACTER: Closed wall, poorly defined, open SW, etc.		
M	C 20				EYE SHAPE/ORIENTATION/DIAMETER. Code eye shape as: C - Circular; CO - Concentric; E - Elliptical. Transmit orientation of major axis in tens of degrees, i.e., 01-010 to 190; 17-170 to 350. Transmit diameter in nautical miles. Examples: C8 - Circular eye 8 miles in diameter. E09/15/5 - Elliptical eye, major axis 090-270, length of major axis 15 NM, length of minor axis 5 NM. CO8-14 - Concentric eye, diameter inner eye 8 NM, outer eye 14 NM.		
N	19 DEG 55 MIN N S				CONFIRMATION OF FIX: Coordinates and Time *		
	79 DEG 57 MIN E W						
	1731			Z			
O	123 / 8				FIX DETERMINED BY/FIX LEVEL FIX DETERMINED BY: 1 - Penetration; 2 - Radar; 3 - Wind; 4 - Pressure; 5 - Temperature. FIX LEVEL (Indicate surface center if visible; indicate both surface and flight level centers only when same): 0 - Surface; 1 - 1500 ft; 8 - 850 mb; 7 - 700 mb; 5 - 500 mb; 4 - 400 mb; 3 - 300 mb; 2 - 200 mb; 9 - Other.		
P	1 / 3			NM	NAVIGATION FIX ACCURACY/METEOROLOGICAL ACCURACY		
Q	REMARKS At about 1630 = Maximum sustained winds observed in ALLEN during This mission were 150 KTs in a band 10-35 nm from center in a bearing of 20°. Peak gust was 192 KTs in same region						

INSTRUCTIONS: Items A through G (and H when extrapolated) are transmitted from the aircraft immediately following the fix. The remainder of the message is transmitted as soon as available for scheduled fixes and at the ARWO's discretion for unscheduled (intermediate) fixes.

* CHECK SUM REQUIRED IN WESTPAC.