

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. 47-80	
				FLIGHT ID 800806H	
				DATE 6 August 80	
TAKE OFF (City or airport) MJSJ		LAND (City or airport) KMIA		ALTITUDE 10900	
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	Possby	Zyker	Jorgensen	W. H.
Gonzalez	Rose	Prinson	Laudin	R. Brink	Hall
Mandelkern		DeGroot		Wirtel	W. H.
Adams		Conner			
PROPOSED MISSION Butterfly page 53 at 1500'					
ACTUAL MISSION AND REMARKS Aborted 1500' after $\approx 1/2$ of pattern as turbulence was such that instruments were flashing and displays could not be read. Completed mission at 10000'.					
DATA COLLECTED AND REMARKS ALLEN RECON					

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION MSJU N18-26.4		DATE		PROG NAM	
WERLEY		ADAMS		N42RF		800806		1243		W66-00.7		6 AUG 78		Allen	
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	+2 -2	Blower out							
124243	18-26.6 66-00.4	4 1	18-26.6 66-00.5		0 -1	18-26.2 66-00.8	+4 -4	Luff							
144736	17-58.4 76-53.6		17-58.4 76-56.8		0 -3.2	17-58.9 76-54.0	-5 -4	MOT Kingston							
152245						19-38.8 79-10.6		J							
152512			19-39.9 79-10.9		(Z)	19-40.9 79-11.7		J							
154511			18-42.0 80-13.0			18-43.1 80-09.9		BTK 105							
160448			18-22.5 78-52.4			18-24.1 78-49.0		TK 345 w/y 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 ^{sever} _{trib.} → 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 ^{simons} 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.	ΔT (2)(1)	TERMINAL ERROR						
				ELAPSE ALIGN POST TIME					LAT	LONG	G				
INS 1	1100	✓	✓	—	0	1137	1914	7.6	+1.0	-2.5					
INS 2 or IMU	1100	✓	✓	—	0	1137	1914	7.6	+1.9	+1.8					
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															

August 1980 Hurricane "Allen"
 H2 RF STJ site press at 1220Z = 1016 mb

REGION IDENTIFIER AND OBSERVATION

Time	Lo	Lo	D	S	Ta	Td	Ra	Pa	St	Pc							
41 00	18.1	70.7	121	13	-3	-41	5811	5486	19.2	1008							
00 00	17.9	72.5	146	17	-3	-18	5799	5481	19.8	1005							
4 43 00	18.0	76.5	168	17	-1	-9	4377	5469	2								
14 50 00	18.1	77.1	180	19	-3	-5	5248	5470	7	947							
15 00 00	18.7	78.0	170	21	22	20	520	570	26	1003							
15 02 -	18.8	78.1	170	21	22	21	476	553	26	1002							1500
16 13	18.9	79.1	197	20	22	22											
16 20																	
18 30	23.6	79.0	119	16	-5	-5	5805	5436	-2	1015							

MANOP HEADING (PRECEDENCE IMMEDIATE)

MISSION IDENTIFIER AND OBSERVATION NUMBER NORA 42 0902 Allen OR 10

(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 / PRESSURE ALTITUDE OUTSIDE EYE
J	18 C / 2400	M	MAXIMUM FLIGHT LEVEL TEMP / PRESSURE 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 5NM. 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	1,2,3 / 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.