

19800808H1 FDIR

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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. 49-80	
				FLIGHT ID 80080817	
				DATE 8 Aug '80	
FLIGHT LOG				ALTITUDE 18-22 Kft.	
TAKE OFF (City or airport) KMIA		LAND (City or airport) KMIA			
PURPOSE Research hurricane "Allen"					
PROPOSED TAKEOFF TIME:			PROPOSED FLIGHT DURATION: 10 hrs		
TIME IN: 0106 ^(8/9) Z			TIME ON: 0101 ^(8/9) Z		
TIME OUT: 1631 Z			TIME OFF: 1643 Z		
BLK. TIME:			FLIGHT TIME:		
FLIGHT PERSONNEL					
OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
Werkley	Correll	Rossby	Zycko	Sheets	B. Schmitt
Gonzalez	Rose	Lambert	Papworth	La Seur	
Mandelkern		Sims		Parrish	
Adams		Conner		P. Black	
PROPOSED MISSION As described in attached sheet.					
ACTUAL MISSION AND REMARKS As described - completed 1 1/2 patterns. Second time at point ①: Aborted mission at 2230 Z. Could hear what sounds like something hitting the fuselage on the outside. Return to Miami.					
DATA COLLECTED AND REMARKS Took lightning strike between ②, ① on second pass thru pattern.					

16232 193065P

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION KMIT N25-48.3 W080-17.6		DATE 8 Aug 1980		PROJ. NAME 6 "ALLEN"				
TIME OF ENTRY		POSITION		TYPE		INERTIAL POSITION		LAT LON COR'S		POSITION		LAT LON COR'S		REMARKS				
163157		N25-48.3 W080-17.6		4/1		25-48.2 080-17.4		-1.6 +1.2		25-48.4 080-17.4		-1.6 +1.2		Block out				
164322		25-48.1 080-17.5				25-48.1 080-17.5		0 0		25-48.2 080-17.2		-1.1 +1.3		TOFF '91'				
173908						26-00.9 84-31.1				26-00.7 84-30.0				EPSON AXP Sonde				
1957														TP TK 290				
192227						24-09.0 92-10.3				24-09.7 92-08.5				J				
193518						24-27.3 93-12.1				24-28.0 93-10.3				A 4				
195017						24-10.3 92-14.2				24-10.9 92-12.5				J				
200730						23-04.7 92-34.8				23-05.5 92-33.6				P 1				
202338						24-18.4 92-22.0				24-18.2 92-21.0				J 14-17				
203701						25-17.0 92-01.9				25-17.5 92-00.9				P 13				
205324						24-16.2 92-30.9				24-16.2 92-30.2				J				
211038						23-48.6 91-08.5				23-48.5 91-08.3				P 4 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	G S						
INS 1	1537	✓	✓	—	—	4	1618	0106	8.8	-3.1	+4.7	4						
INS 2 OF IMU	1537	✓	✓	—	—	3	1618	0106	8.8	-1.3	+1.6	1						
ALIGN REMARKS:													25		2506		2666	
OTHER REMARKS:															1502		1544	
TYPE OF FIX : (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER (8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL																		

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
213155			24-16.9 92-33.1		24-17.6 92-33.9		9
214514			24-37.3 92-36.1		24-38.4 92-35.8		pt 4
215957			24-19.1 92-41.1		24-18.0 92-37.6		9
221620			23-11.0 93-03.5		23-10.3 93-03.1		pt 1
2245			24-04.2 91-29.0		24-04.2 91-29.1		TK 070
			11				MOT ORTAN
010140	N25-48.3 W080-17.6	4/1	N25-51.1 W080-13.0	-3.2 +4.6	N25-48.4 W080-16.1	-1.1 +1.5	LAND
0106	N25-48.3 W080-17.6	4/1	N25-51.4 W080-2.9	-3.1 +4.7	N25-48.6 W080-16.1	-1.3 +1.6	Block in
	1422						
	1422						
	715						
	2215						
	2235						
	2245						
	2506						

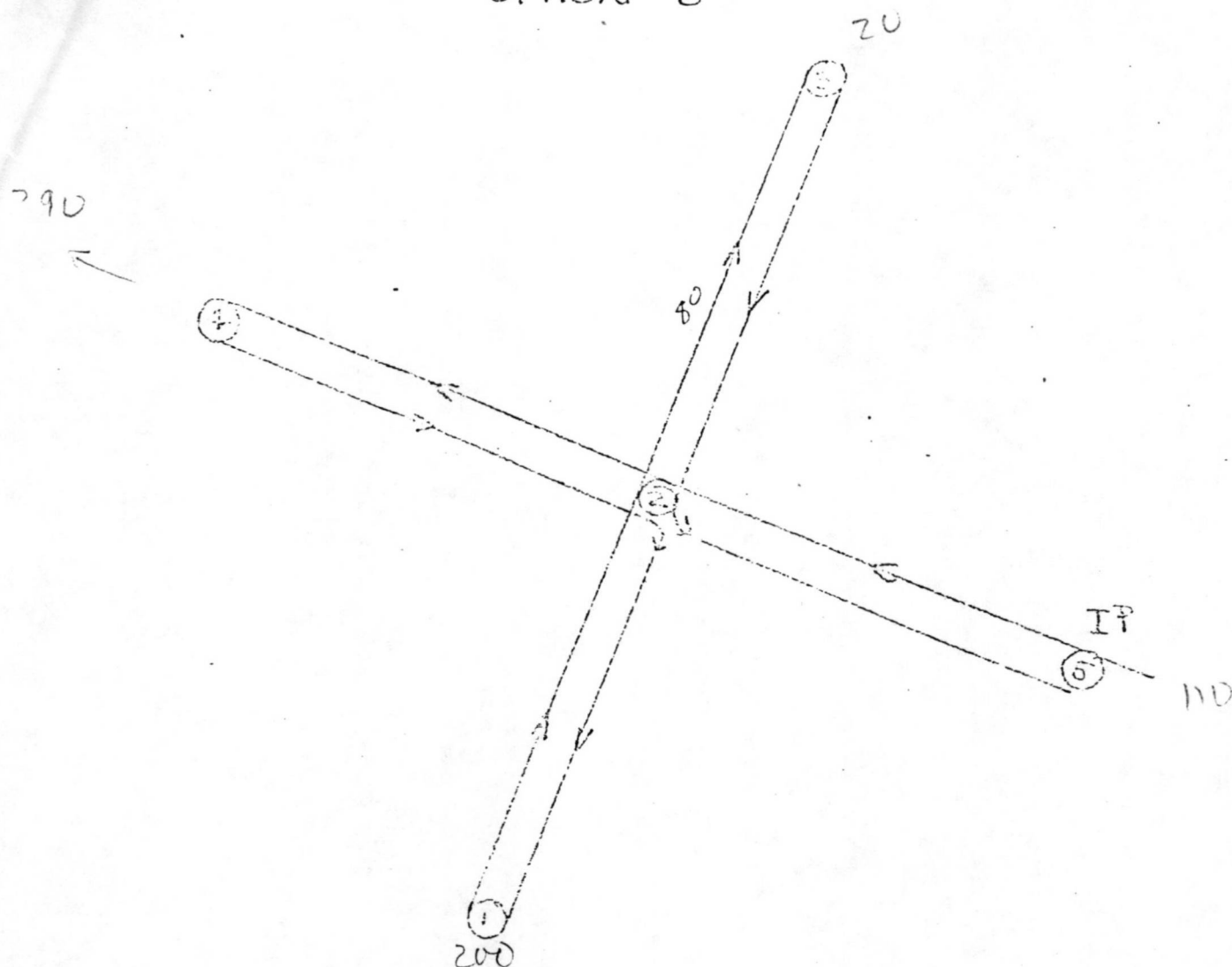
8 (-) Aug '80
MH20RF

"Allen"

Time	Ln	Lo	D	S	Ta	Tb	Ra	Pb	Hd	Trk	Sp	SST	TAC		
174000	26.0	84.6	124	10	-2	-9	5193	4900	274	275				Sonde	Launch
180200	25.7	86.5	133	15	-1	-23	5178	4895	236	240	1011	21.2			
180400	25.6	86.7	130	14	-2	-10	5173	4895	220	221	1011	21.5	140	2 min	Right
180720	25.6	86.9	134	16	-2	-9	5173	4895	190	196	1011	21.6	138	4 min	Left
1810															
181220	25.3	87.1	130	17	-2	-14	5166	4893	220	222	1012	21.4	138	2 min	Right
181510	25.3	87.3	131	19	-2	-14	5163	4893	235	241	1011	21	138		on track
185500	23.6	90.2	166	26	-10	0	5693	5525	233	242	1001	-4	145		
185730															
190200	23.5	90.6	188	28	-2	-2	5664	5472	280	290	995	-4	150	(5)	IP
191100	23.8	91.3	195	22	-1	-2	5617	5475	224	292	978	16	140		
192030	24.1	92.0	226	47	0	15	5320	5460	307	312	930	17	151		Sonde
1922	24.2	92.2	300	2	6	-1	5302	5466	300	240	930	21	950	(2)	eye
1937	24.5	93.3	33	24	-1	0	5631	5467	104	110	982	4	147	(4)	
1950	24.2	92.2	80	5	4	0				110	929		158	(2)	eye
2000	23.6	92.4	284	22	-1	-1	5607	5480	211	202	977	13	150		
2006	23.1	92.6	295	18	-1	-1	5639	5479	15	21	981		152	(1)	sample
2002	24.3	92.3	107	21	6	-2	5331	5549	22	20	930		150	(2)	sample
2036	25.2	92.0	115	27	-1	0	5677	5510	197	207	981		198	(3)	
2052	24.3	92.5	1	13	6	-2	5246	5493	112	110	923		138	(5)	eye
2110	23.8	91.1	196	24	-9	-3	6232	6061	283	290	923		140	(5)	sonde
2129	24.3	92.4	182	50	-2	0	6055	6091	271	290	944		157		Sonde
2132	24.3	92.6	298	12	3	-7	5898	6080	290	288	917		140	(2)	Sonde
2143	24.6	93.5	29	23	-4	-6	6270	6071	303	294	979		153		Sonde
2146	24.6	93.7	20	24	-4	-6	6277	6073	110	118	479		151	(4)	
	24.3	92.7	60	4	6	-9	5887	6091	202	200	912		160	(2)	eye
2224	23.3	93.0	288	25	-4	-4			343	350			161	(1)	
2230															

APPROX. MISSION
sounds like something is hitting
the fuselage on the outside.

3 A/C MODIFIED EYE-WALL EXP
OPTION B



ALL AIRCRAFT FLY 5,2,4,2,1,2,3,2,5,2,4,...
FOR DURATION

ALTITUDES 41C 12000 FT
 42RF 18-20000 FT
 43RF 5000

OPTION B WILL BE FLOWN IF THE
EYE IS LARGE OR IF A SECONDARY
WIND MAXIMUM IS PRESENT.

800808H ALLEN

TIME	TK	LA	LO	HA	PA	TA	TL	VID	WIC	250 WT	SP		
2101	202	23 58	91 38	1514	1635	20	19	187	35	1300	987	EST	
2107	205	24 10	91 79	1470	1653	21	18	170	28	1425	980	"	
2114	275	24 19	92 31	1460	1761	21	20	150	25	1118	963	"	
2116		24 23	92 33					152	25				
2118		24 24	92 34	1432	2081	24	18			752	923	SS	
2119		24 28	92 34										
2130	210	25 56	93 43	1516	2096	16	16	255	75	258		WNW	
2146		25 00	93 57	1510	1650	19	19	260	40	1300	985		
2152	116	24 55	93 37	1475	1633	20	19	256	28	1271	981		
2206	111	24 36	93 73	1470	1756	21	19	212	48	1124	963		
2203		24 30	93 60	1510	2181	25	16	160	05	721	920	SS	6
		24 19	92 74										
2206		24 19	92 74					280	55			SSW	
2218		PT 1											
2222	025	23 51	93 07	1496	1646	20	19	295	22	1291	983	"	
				D11									
2229	024	24 16	93 07	1497	1694	21	17	287	32	1175	970	"	
								264	60				
2235		24 31	92 77	1439	2135	26	18	281	10	1294	917	SS	7
2237		24 18	92 46					120	70			NW	
2250	023	25 57	92 33	1482	1607	18	18	117	47			"	
2258	231	25 54	92 34	1501	1601	19	18	115	50	1344	990	"	
				D1A 10									
2314	201	24 70	92 73	1476	1722	20	18	111	43	1181	971	"	
2317		24 25	92 83	1450	2162	24	17	112	70				
2319		24 21	92 50					0	0	671	915	SS	2
		2355Z	TMP		90	WIND		120/16	01LT	29	95		
		0055Z			87			120/13		29	96		
010358	ON	KMSY	1014.0	32.3	PA6								
0115	IN	KMSY											

800208H ALLEN

TIME	TH	LA	LO	RA	PA	TA	TD	WD	WS	250 HT			D
1610	OUT	MIA											
1650	OUT	MIA											
1710	273	25 97	83 88	5156	4839	-1	-16	115	09	5801			
1740	237	25 68	86 41	5140	4856	0	-11	106	14	5906			
1801	240	25 58	90 87	1500									
1814	LV	1500											
1815	242	24 20	89 33	442	476	24	20	140	20		005		
1820	239	23 75	90 31	470	512	20	20	150	27		994		
		CLMB	70 52		GNAPHIC	OUT							
1840	240	22 58	90 87	1984	1598	20	19	185	31		990	ESS	
		DIA	15										
1845	240	22 67	91 19	1407	1567	20	20	200	26		986	"	
1850	291	22 20	91 50	1438	1610	21	18	200	27		982	"	
1855	306	23 95	91 83	1420	1672	20	20	215	27		971	"	
1856		24 00	91 92					220	45		960	"	
1857		24 06	91 92	1421	1603	19	18	220	45		949	"	
1859		24 11	92 08	1482	1593	22	18	220	25		990	5 1	
1901		24 15	92 22			18	18	215	50		760	WAW	
1905	243	24 55	92 49	1462	1670	21	18	220	33		977	"	
1910	288	24 36	92 86	1465	1601	19	19	245	22		986	"	
1912	DT	DT 4		24 06	92 11	5							
1915	150	24 46	92 00	1482	1676	19	19	245	31		987	"	
1920	112	24 35	92 74	1442	1605	21	18	225	30		981	"	
				DIA	12								
1924	111	24 25	92 46	1452	1697	21	20	220	40	1186	971	"	
1926	111	24 21	92 54	1450	1836	20	20	220	55	1094	960	"	
									60				
										800	928	"	
1928	20	24 14	92 16	1460	1587	21	20	200	21	1110	971	5 2	
1930	20	24 01	92 16	1452	1807	20	20	242	42	1130	965		
		24 08		92 12	5							S.W.	
1937	196	23 63	92 25	1488	1600	21	18	220	21	1222	983	"	
1943	200	23 55	92 39	1470	1602	21	18	224	19	1305	981	"	
		PT 1											
1950	018	23 49	92 44	1445	1603	21	18	290	21	1221	982	"	
1955	018	23 20	92 31	1457	1609	20	18	270	28	1218	975	"	
1958		24 00	92 36					255	45				
2000		24 18	92 30			24	18	255	01	552	97	5 2	
				24 10	92 18	5							
2002		24 23	92 24					110	45			NOE	
2005	037	24 46	92 17	1469	1704	19	19	114	46	1003	974	"	
2010	052	24 74	92 03	1473	1639	20	20	102	24		989	"	
2015	023	25 06	91 88	1458	1574	18	18	114	48	1324	989	"	
2016		PT 3											
				DIA	12								
2020	200	25 05	92 01	1459	1583	19	19	108	43	1306	986	"	
2026	203	24 70	92 16	1456	1614	20	19	108	36	1253	979	"	
				DIA	14								
2031		38	31					112	60				
		36	32					120	65				
2034		24 25	92 38	1491	2093	24	17	106	01	815	926	5 4	
2036		24 13	92 27					200	50			ESS	
				24 15	92 23								
2041	115	24 09	91 91	1448	1633	21	17	190	27	1257	980	"	
2053		PT 5											