

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 940925I	FM: PVR	TO: PVR
FLT NO: 94-30	BLK IN: 0319	ATA: 0313
ETD: 172	BLK OUT: 1725	ATD: 1734
ETE: 9+	BLK TIME: 9:54(9.9)	FLT TIME: 9:39(9.7)
SPONSOR ORG: HRD	PROGRAM: Research	PURPOSE: H. Division

OAO PERSONNEL

AC McKim ✓	SYS ENG LYNCH
CP Tedesco ✓	DATA SYS DELONDO ✓
NAV RAYBUN	RADAR
FE MOORE ✓	BT/ODW PAADAS ✓
RADIO SADS SOLCI ✓	CLD PHYS
FD PAADISH ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
MARKS, F. ✓	P.I.	HRD
WILLOUGHBY, N. ✓	Radw	↓
FRANKLIN, J.	ODW	
GRIFFIN, J. ✓	Work Station	
BLACK, R. ✓	PMS	
FREMMEL, D. ✓	LODZ	
UMBERTO FERRERES ✓	VISITOR	
OHLEND, B. ✓	CAMPA	LODZ LIER AF INAX
Jim House ✓	Recording	↓

29.87
1010.5
CALM
32/22x
1008.6
N/6
SP 1009.1
Fm 1.5K
SP 1008.2
Fm 1.5K
SP 1010.1
Fm 5K

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

2225Z - RAD PROBBS

FIXES 2033Z 18°58'N 120°04'W

2106Z 19°02'N 120°05'W

2138Z 19°05'N 120°03'W

2211Z 19°13'N 120°04'W

2249Z 19°17'N 119°59'W

2318Z 19°19'N 120°00'W

2349Z 19°23'N 119°56'W

0012Z 19°28'N 119°58'W

8 penetrations

940925 I H. OLIVIA

EDGE ABJECT

Time	LAT	LONG	TK	WD	WS	PA	GA	TA	TD	SD	PS	BLK
1725	2040.7	10515.1				39		33.8	24.3		4008.6	BLK
1740	2057.0	10539.8	266	34	19	1593	2001	18.1	13.5	1009.5	798	↑
174515	2035.6	10605.2	269	41	12	3231	3430	10.4	2.3	1009.5	672.9	↑
175230	2031.4	10638.8	260	4	20	4659	4937	0.2	-10.6	1011.4	563.7	↑
180930	2026	10801	267	31	12	5559	5894	-4.5	-19.4	1008.4	501.1	-
1835	2013	11011	266	48	12	5554	5887	-3.4	-22.3	1005.8	501.3	
193215	1944.4	11513.8	264	152	24	5550	5870	-4.8	-22.7	1008.4	501.7	
200645	1920	11813	262	170	54	4041	4221	2.6	1.2	1007.7	613.1	
2024	1857	11923	DROPP AT E N		BAD		BAD					
202545	1857	11933	271	185	69	4170	4262	3.3	4.2	991.8	603.2	
2033	1858	12004										
204630	1853	12059	DROPP W OF CENTER									
2106	1902	12008										
21125	1922	11945	41	132	72	4187	4265	3.9	5.4	991.5	602.1	
212730	1948	12047	DROPP W OF CENTER									
2132	1929	12005	174	93	67	4190	4233	7.1	4.9	986	603.6	
213420	1905	12003										
215104	1842	11959	DROPP S SIDE									
215245			2002	18	17.6	119	50					
2211	1913	12004										
222545	1936	12050	197	31	36	4150	4276	12.9	4.6	994.3	604.6	
223804			DROPP W SIDE									
224330	1907	12026	78	328	69	4203	4261	19.2	4.9	985.3	600.3	
2249	1917	11959										
230116	1928	11907.8	DROPP E SIDE									
2307												
23015	1943	11939	219	133	69	4177	4259	3.7	5.7	990.7	601.1	
2318	1919	12000										
233930	1840	11956	1	253	52	4155	4266	4.0	6.1	997.1	604	
2349			DROPP									
2349	1923	11956										
235830	2006.6	11955	1	105	51	4147	4267	4.6	5.7	994.6	604.7	
0012	1928	11958										
001630	1936	11925	86	182	84	5069	5163	-0.3	-	980	536	
0050	1946.5	11640.5	82	183	43	7654	8096	-17.8	-20.0	1001.1	374.2	
012615	2006.6	11328.8	86	159	10	7648	8101	-18.1	-33.1	1003.7	374.4	
020430	2021.3	11005.9	86	91	7	7648	8100	-19.1	-20.4	1005.6	374.5	
021730	2024.8	10857.7	87	31	7	7648	8136	-18.5	-19.3	1010.6	374.6	
0231	2030.5	10745.2	88	252	1	7606	8057	-18.2	-33.9	1006.6	377.0	
0318	2046.7	10515.1				47		31.7	25.0		1007.7	

A/C COMMANDER		NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME	
MCKIM		RATHBUN	N43RF	94-30	1732Z	PVR	25SEP94	OLIVIA	
TIME OF ENTRY	POSITION	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS
	GPS				ATT REF				
1720		GPS							ENG START
1724									TAXI
1732		#1							TAKEOFF
	2028.3		20 25.0	+3			180	273	
1757	107 02.2		107 02.2	0			263	271	TRANSIT TC 5
	2012.3		20 12.7	-4			180	268	
1837	110 22.3		110 21.9	+1.4			292	266	
	1949.9		1949.7	+2			180	261	
1921	114 16.9		114 16.6	+3			303	263	
	1914.3		19 14.6	-3			140R		
2013	118 42.6		118 42.1	+5			259		
	1557.3		15 57.5	-2					
2023	119 21.4		119 21.1	+3					DROP
	1557.8		15 57.9	-1					5
2032:59	120 03.9		120 03.6	+3					
	1553.2		15 53.2	0			140R	147	
2046	120 59.9		120 59.4	+5			309	149	DROP
	1401.9		14 02.4	-5					5
2106:10	120 04.9		120 03.9	+1.0					
	1947.9								
2120	119 33.8								DROP
	1949.4		19 49.6	-2					
2127	120 07.3		120 06.2	+9					DROP
	1904.9		19 05.1	-2					5
2138:45	120 02.8		120 01.9	+9					
ATC CLEARANCE:			1952 263/180		260/150 1959		255/100		
			2033 18 58N		120 04W NU2				
			1902		120 06W 42RF				
ENROUTE CLEARANCES:			1914N		120 02 W W				
			2318		110 58W 42RF				
			2249		0759 W				
			0012		19 28 119 58				
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									

TIME OF ENTRY	POSITION	TYPE TIME USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS
	1813.8		1813.9	-1			146R	087	
2151	12000.0		11959.3	+7			307	064	DROP
	1912.6		1912.9	-3					§
2210:54	12009.7		12003.8	-1					
	1916.8		1914.1	X					§
2249:10	11958.7		11957.1	X					
	1927.5		1925.2	-7					
2301	11907.1		11906.0	+1.1					DROP
	1918.8		1919.0						§
2318:06	12000.1		11959.9						
	1839.3		1940.2	-9			146R	348	
2339	11955.9		11956.0	-1			272	359	DROP
	1923.1		1924.2	-9					§
2349:03	11956.3		11956.1	+2					
	1924.5		1925.7	-1.2					§
0012:30	11957.6		11956.0	+1.6					
	1943.4		1944.3	-9			250	091	
0045	11705.4		11705.1	+3			301	092	
	2012.6		2013.9	-1.2			240	083	
0142	11204.1		11202.8	+1.3			301	085	
	2026.2		2027.6	-1.4					
0222	10530.4		10530.8	-4					
	2040.9		2041.7	-8					
0313	10515.1		10514.4	+7					LAND

FLIGHT PLAN

PROPOSED T.O. 1700Z
ACTUAL T.O. 1732Z

WAY POINT	TO	RTE	ALT	TAS	TC	W V		TH	VAR	MH	GS	ZONE DIST	TOTAL DIST	ZONE TIME TOTAL TIME	PROPOSED ETA	ETA ATA
						DC										
2	N2040.8 W105 15.2 PVR				266							867			2045	
1	1855 11919															
2	1858 12057															
3	1823 12041															
4	1943 11930															
5	1952 12005															
6	1815 12003															
7	1829 11926															
8	1949 12042															
2	1912 12056															
96	N1855 W120 12															
1	1914 11909															
4	1950 11925															
3	1843 12034															
6	1829 12001															
5	2013 11956															
218.4	2041.323 105 14.664 RWY EAST END															
038.4	2040.563 105 15.529 RWY WEST END															

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	1520Z				0	1719	0313	254	-8	+7	4
INS 2 IMU	ATT ALER										

ALIGN REMARKS:

OTHER REMARKS:

5+41
5+13

940925I N43RF HURRICANE OLIVIA HRD RESEARCH

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1 (See note)
Accelerometer	1
Temperature Probe	1
Dew Point Probe	1
Altimeter	APN-232
Altitude change option (for vertical winds)	RA
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 29
Constants File	CO3943.CON

Notes:

INE 1 positions were corrected every hour during the ferries, and about every 40 minutes while in the storm, using good GPS positions. No corrections were made to INE 1 groundspeeds. INE 2 was used for cockpit attitude instruments only, and provides no position or groundspeed information on the Type 4 record.

The primary General Eastern Dewpointer (TW1) fluctuated wildly at times in the storm, probably due to water ingestion, and was patched with an offset TW2 source. These patches were placed between 2105Z-2150Z, and 0000Z-0125Z.

	<u>Aircraft</u>	<u>Tower</u>
Takeoff surface pressure	1009.9 mb	1010.5 mb
Landing surface pressure	1007.7 mb	

Jack Parrish, Flight Director