RFC-1 WORK FORM (7-76)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
RESEARCH FACILITIES CENTER
MIAMI, FLORIDA

FLIGHT LOG

AIRCRAFT: N43RF
FLIGHT NO.: 51-82
FLIGHT ID: 820728I
DATE: JULY 28, 1982

TAKE OFF (City or airport)	LAND (City or airport)	ALTITUDE
MIA	MIA	1K-3K

PURPOSE: SEA-BREEZE #2

PROPOSED TAKEOFF TIME: 182	PROPOSED FLIGHT DURATION: 5HR
TIME IN: 2220	TIME ON: 221302
TIME OUT: 1725	TIME OFF: 173515
BLK. TIME: 4.9HRS	FLIGHT TIME:

FLIGHT PERSONNEL

OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
TURNER		HAYDU	STONE	JORGENSEN	BLACK
NOBLE		PARADIS		LORD	BELLI
COX		SCHRICKER		MARKS	
FLEURY		GOLDSTEIN		FEINBERG	

PROPOSED MISSION: Do L's and boxes around convective elements at between 1K and 3K. Some pent. at high levels before egoing back to MIA

ACTUAL MISSION AND REMARKS

as planned

DATA COLLECTED AND REMARKS

1 SLOW
V P/O
9 RADAR
8 DOPPLER
OPSM

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
Turner	Cox	43	#2	173515	MIA - APF area	8207 28	

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
1717	25-48.2 080-17.6		✓		✓ 090-17.5	+0.1	Ramp 113.0 APF 116.8 FMY
	update		26-15.3 081-26.7		26-15.3 081-26.6		26-15 081-25 IP
							#7
		(3)	081-54.4 25-55.0		Wing		
1916	26-15 081-25		26-15.0 081-25.8	0 -0.8	26-15.1 081-25.7	-0.1 -0.7	IP
2012	✓		26-14.9 081-25.5	+0.1 -0.5	26-15.3 081-25.0	-0.3 0	IP
2055	25-59.0 081-27.5		25-58.1 081-26.7	+0.9 +0.8	25-59.1 081-26.6	-0.1 +0.9	301/20 APF
2129	26-25.3 081-29.0		26-24.0 081-28.3	+1.3 +0.7	26-25.5 081-27.4	-0.2 +1.6	over Lake West Init
			221302				Land
	N 25-48.2 W 080-17.6		25-46.6 080-16.6	+1.6 +1.0	25-49.1 080-15.9	-0.9 +1.7	Ramp
			0		1		

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE / ELAPSE ALIGN POST TIME	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERROR LAT	LONG	G
INS 1	1535				0	1708	2218	5.2	+1.6	+1.0	0
INS 2 or IMU	✓				1	✓	✓	✓	-0.9	+1.7	1

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

Revised Sea-breeze Experiment - July 1982

Initial alert: Noon EDT one day before experiment

Updated alert: 7:30 a.m. day of experiment

Final go decision: 11:00 a.m.-1:30 p.m. day of experiment

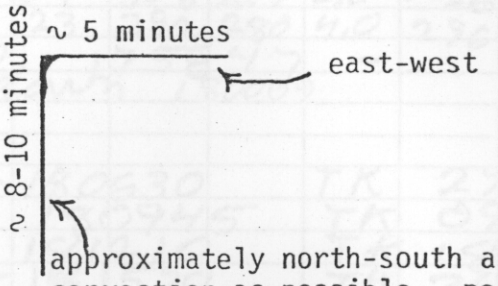
Location of experiment: Naples area

Maximum duration of flight: about five hours

There will be three basic patterns. The lead project scientist (Jorgensen) will decide the sequence of the patterns in consultation with the flight director.

1. L-shaped pattern (VFR at 1,000 ft.)

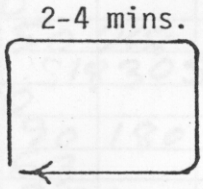
60% of mission



The precise location of the L may vary with time. The pattern may be flown in either direction.

2. Box pattern (VFR at 1,000 ft. or IFR at 3,000 ft.)

30% of mission



box should be 2-4 minutes on a side with a convective cell in the middle

3. Line pattern down convection (penetration - IFR maximum possible altitude)

10% of mission

will be flown near the end of the mission with the Doppler pointing downward, repeat if time permits.

59-4

820728I page 1

IME	LAT	LON	TK	WD	WS	RA	PA	TA	TD	SST	PS	FWR	SF
1618.3	30.07 ALT			PS	1017.6		(415)207		(-130)92				
MIA	SLP	ALT											
0700	1018.4	30.07		NOON									
	1018.9	30.09		11AM									
1724	BLOCK OUT												
172430	25 80	80 29	279										
	computer system diagn't update NAV												
	system reloaded												
172900	25 80	80 29	215	320	0.5	1510	-37	36.8	21.5	35.1	1012.7	-0.3	
1000	1015												
1500	1015												
2000	1015												
2500	1015												
3000	1015												
174630	26 12	80 64	308	269	2.0	1266	1186	24.3	13.5	30.7	828.6	-0.2	101
175530	26 20	81 23	290	280	4.0	296	262	32.5	19.9	34.2	981.7	-1.1	101
at 1000'	at IP	175847	—										
	SYS	down 180009											
	wind L												
	180500 — 180630			TK 270			256/5						
	180815 — 180945			TK 090			240/2½						
	181040 — 181210			TK 180			240/4.5						
	181350 — 181520			TK 360			240/3.0						
	note a def. basis in WS when tracking 090												
182000	— 182515			TK 090 to IP									
182915	— 183530			TK 270 to 5 mile, ort above									
183000	26 25	81 50	268	W L+V		291	257	33.5	19.4	33.7	983.7	2.2	101
	SYS DOWN 183050												
183630	— 184050												
183800	26 14	81 90	180	227	4.3	292	252	30.7	22.6	30.9	983.2	-0.2	101
184230	— TK 63												
184350	— TK 351			DOPPLER RUN (D.R)									
184430	26 03	81 79	354	257	3.4	291	251	30.8	23.2	30.5	983.5	-0.6	101
185020	— 185350 TK 90												
185510	— 185900												
185550	26 18	81 53	178	234	2.6	281	251	33.7	19.7	32.8	983.5	1.6	101
190005	— 190245 TK 090												
190030	25 94	81 59	270	213	5.0	285	246	32.0	22.0	34.0	984.0	-1.3	
190316	— 190750			TK 360									
190530	26 08	81 79	350	270	3.6	285	246	31.2	21.0	31.0	984.0	0.0	
190950	26 24	81 81	090	24	4.0	285	244	31.7	21.8	33.0	984	-1.2	
190930	— 191523			4	090								
191820	26 24	81 39	272	273	2.0	288	257	33.6	17.8	33.5	984.9	0.8	
191856	— 192600			TK 270									
182425	SYS DOWN												
192650	— 193140			TK 180									
192700	26 20	81 91	181	260	4.5	303	258	30.8	21.8	30.5	983.3	0.2	
193215	— 193700 TK 090												
193230	25 90	81 85	090	200	2.0	286	250	31.0	22.5	30.5	983.5	-0.5	
193800	— 194456 TK 360												
193820	25 96	81.49	360	190	3.0	282	248	33.0	20.5	33.6	984.8	0.8	

59-4

8 20728 I

IME	LAT	LON	TK	WD	WS	RA	PA	TA	TD	SST	PS	FWZ
194550 - 194747			TK 270									
195035 - 195315			TK 090									
195418 - 195806			TK 180									
195430	26 35	81 46	181	180	3.0	285	252	33.9	18.5	35.8	982.6	-1.4
195937 - 200345			TK 270									
20000	26 06	81 55	269	260	4.0	312	281	32	20	34.5	979.2	0.7
200420 - 200640			TK 360									
200747 - 201230			TK 090									
200800	26 24	81 54	88	270	3.0	282	246	32.0	20.7	33.1	983.5	-0.6
201700 - 202330			TK 270									
SYS DOWN 201433												
202420 - 202705			TK 180									
202430	26 18	81 91	181	2[illegible]	4.0	293	254	31.0	22.2	30.5	982.3	-0.1
202923 - 203720			TK 090									
203000	26 04	81 91	090	240	2.0	312	268	31.0	22.0	30.7	983.1	-1.1
203830 - left 30'			TK	340								
203855 - 204110				320								
204208 - 204400				240								
204455 - 204740				155								
change doppler tapes												
205425 - 225545			TK 090									
205650 - 210056			TK 360									
210153 - 210415			TK 270									
210500 - 210950			TK 180									
change doppler tapes												
211615 - 212055			TK 090									
212900 - 212726			TK 360									
212830 - 213320			TK 090									
212945	26 39	81 52	264	292	4.5	310	279	32.2	19.6	27.0	980.0	-0.5
change Doppler tape												
213545 - 214148			TK 180									
214610			TK 090									
214700 -			TK 360									
215100	26 22	81 40	010	340	2.0	313	278	28.7	22.0	27.0	985	-1.5