

RFC-1 WORK FORM  
(7-76) U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
RESEARCH FACILITIES CENTER  
MIAMI, FLORIDA

AIRCRAFT  
**N43RF**

FLIGHT NO.  
**47-82**

FLIGHT ID  
**820714I**

DATE  
**JULY 14, 1982**

FLIGHT LOG

TAKE OFF (City or airport)  
**MIA**

LAND (City or airport)  
**MIA**

ALTITUDE  
**500 7500**  
**1000**  
**2500**

PURPOSE  
**SEA BREEZE FLT #1**

PROPOSED TAKEOFF TIME: **13Z**

PROPOSED FLIGHT DURATION: **10HRS**

TIME IN: **2215**

TIME ON: **220804**

TIME OUT: **1300**

TIME OFF: **131547**

BLK. TIME: **9.3**

FLIGHT TIME:

FLIGHT PERSONNEL

OPERATIONS CREW		SCIENTIFIC CREW		NHRL (6) VISITORS	
GUNNOE	RICCI	HAYDU	SCHRICKER	BURPEE	MARKS
NOBLE	FLEURY	PARADIS		BELLE	PARRISH
MANDELKERN		GOLDSTEIN		R. BLACK	
COX		STONE		JORGENSEN	

PROPOSED MISSION  
**see enclosed plans**

ACTUAL MISSION AND REMARKS

**as planned**

**✓ ps const should be +3 next**

DATA COLLECTED AND REMARKS

**1 SLOW**  
**2 P/O**

**10 RADAR**  
**3 DOPPLER**

**2 PMS**  
**N-2**  
**T-1**  
**AV-2**

**use new WND CALA**

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
Gunnor	Cof	43	#1	13 1547	mid	820714	Sea Breeze

TIME OF ENTRY	POSITION	TYPE	INERTIAL #/ POSITION	LAT LON COR'S	#2 POSITION	LAT LON COR'S	REMARKS
1249	25-48.3 080-17.6		25-48.3 080-17.5	0 +0.1	25-48.3 080-17.6	0	Ramp.
1325			26-1				Switch to #2 #1 Status 075 #2 " 036
1342			26-15.3 081-48.7		26-15.4 081-48.8		ov coast.
1359			26-15.4 081-48.0		26-15.5 081-48.1		ov coast
1400							Switch to INE #1 #1 status 072 #2 045
1416			26-15.2 081-48.1		26-15.2 081-48.2		ov Coast
1446			26-15.0 081-48.1		26-15.0 081-48.1		ov Coast
1510			26-14.5 081-47.8		26-15.2 081-48.1		ov Coast (2)
							174 / 22 6
							308 / 32 28

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.	Δ T (2)(1)	TERMINAL ERRORS		
									LAT	LONG	G S
INS 1					5	1234					
INS 2 or IMU					✓	✓					

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

8762



COUNTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
							170 24 325 10
	26-15.0 081-25.0				updated position		IP update
	26-13.0 081-24.5		26-16.6 081-24.4		26-12.2 081-23.7		314/133
1651	26-15 081-25		26-15.2 081-25.3	-0.2 -0.3	26-15.0 081-25.0	0	IP update
							wing #1 #2 decoupled!
1700			26-14.7 081-48.4		26-14.4 081-48.0		on Coast
1734			26-16.6 081-49.8		26-14.6 081-46.9		on Coast
1750	26-15.0 081-25.0		26-09.0 081-23.9		26-14.9 081-23.8		IP update (INE# 2 bits)
1743	26-14.0 081-45.0		26-12.4 081-46.0		26-14.7 081-41.6		340/72 switch
1755							1755 → to Syst 2
1756			26-15.5 081-49.2		26-14.5 081-47.3		coast
	26-11.8 082-00.5		26-13.2 082-05.7		26-12.3 082-00.7		020/25 FMY
1810	26-15.0 081-25.0						wing # 2 IP update
1814	11		26-15.3 081-23.5		26-14.5 081-24.5		IP ✓
1833			26-14.8 081-24.2		26-14.3 081-24.7		IP update
1902	26-15 081-25		26-15.3 081-24.2		26-14.8 081-24.0		IP
1921	11		26-15.2 081-24.4		26-14.6 081-24.6		IP
	26-15.2 081-41.2		26-15.3 081-40.1		26-13.9 081-41.0		335/22 FMY





Revised Sea-breeze Experiment - July 1982

Initial alert: Noon EDT one day before experiment

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

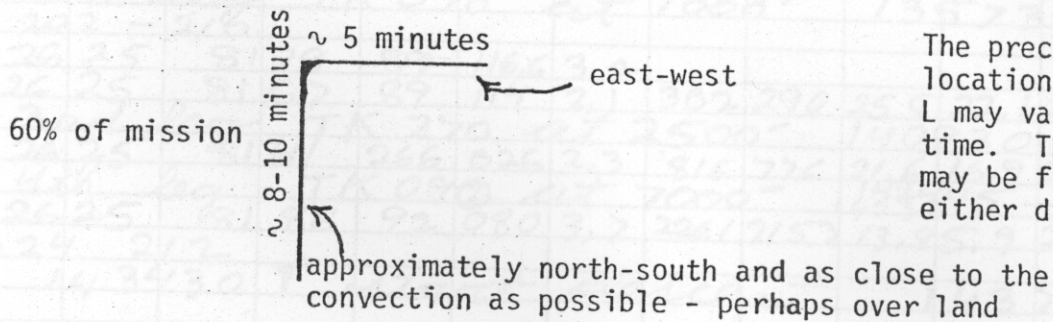
Final go decision: 11:00 a.m.-1:30 p.m. day of experiment

Location of experiment: Naples area

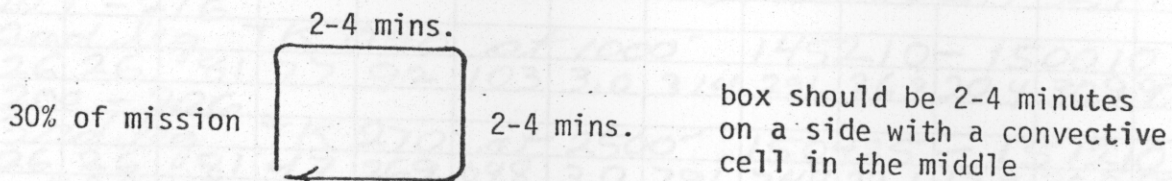
Maximum duration of flight: about five hours

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.)



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



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.

59267  
NOON

820714I

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TIME	LAT	LONG	TK	WD	WS	RA	PA	TA	TD	SST	PS	FW2
		30.05	MIA	ALT		(+20)	05	(-100)	29.2		PS-1014.7	
130750	25.80	80 29	149	25.8	0.4	1497	-13	33.5	22.7	30.9	1014.8	0.0
133230	26.17	81.18	294	25.6	3.3	789	719	22.4	17.8	27.4	960.0	0.8
133640			glick in DBP									
①	1st leg	TK 270	at 500'	133640	-	134335						
133800	26.24	81 53	275	22	3.0	144	144	26	22.7	28.1	976	0.9
134045	203	-216	drift 1st									
	Mind L											
130-150/2	134420	-	134620	TK-270	197	=	20 2	TAS				
	134720	-	134920	TK-180	197	-	20 4	TAS				
	135112	-	135312	TK-360	195	-	20 2	TAS				
135730	135410	-	135610	TK-090								
	pressure glick (ps)											
	2nd leg	TK 090	at 1000'	135730	-	140535						
135859	202	-	216									
135930	26.25	81 78	89	116.6	3.2							
140120	26.25	81 67	89	114	2.1	302	290	25.5	22.1	29.7	979.0	0.3
	3rd leg	TK 270	at 2500'	140930	-	141800						
141020	26.25	81 41	266	026	2.3	816	776	21.6	16.9	28.0	923.4	0.3
	4th leg	TK 090	at 7000'	142545	-	143205						
142530	26.25	81 86	92	080	3.7	2261	2153	13.85.9	29.5	779.7	0.5	
143115	224	212	143430 ? start descent									
				143738	at 500'							
②	1st leg	TK 270	at 500'	144040	-	144810						
144130	26.24	81 48	274	41	4.0	156	145	27.2	21.7	32.9	976.0	0.0
144350	207	-	216									
	2nd leg	TK 090	at 1000'	145210	-	150010						
145420	26.26	81 77	92	103	3.0	314	291	26.3	20.4	30.9	978.2	0.3
145625	200	-	206									
	3rd leg	TK 270	at 2500'	150425	-	151210						
150520	26.26	81 47	269	048	3.0	791	744	22.1	17.0	30.9	927.1	0.4
	DBP drop to very low values per alt at a min of 2 two. (2nd time) (probably in turn)											
150820	210	-	215									
	4th leg	TK 090	at 7000'	151830	-	152555						
151930	26.27	81 80	93.7	91	3.1	2254	2143	13.6	6.5	24.9	780.8	0.4
	start descent		152600	500'	at 153025							
③	1st leg	TK 270	at 500'	153035	-	153740						
153200	26.27	81 51	271	49	5.3	144	126	28.0	22.0	36.2	998.1	0.5
153345	206	-	212									
	2nd leg	TK 090	at 1000'	154200	-	155015						
154250	26.33	81 93	092	88	1.9	311	286	26.7	21.1	34.8	979.9	0.4
	PS glick											
154623	205	-	207									
	3rd leg	TK 270	at 2500'	155800	-	160530						
155830	26.24	81 47	270	33	4.0	747	1014	22.8	19.3	31.0	931.3	0.4
160038	207	-	208									
	4th leg	TK 090	at 7000'	161015	-	161755						
161100	26.24	81 88	089	102	3.8	2256	2149	13.4	6.4	26.0	780.9	0.1
	start descent		161800	500'	at 162200							



160° track

TIME	LAT	LONG	TK	WD	WS	RA	PA	TA	TD	SST	PS	FWZ
④ 162300	26 25	81 48	270	42	5.0	146	136	28.4	21.2	40.8	996	2.1
162713	1st leg at 500' TK 090 162200 - 162935											
	197-203											
	163000 - 163555 run down coast for Doppler											
	163700 - 164205 run up the coast CC CC											
	202-208											
164530	26 24	81 72	270	78	4.8	304	290	27.4	18.7	33.7	979.0	-1.2
164910	2nd leg at 1000' TK 090 164320 - 165020											
	207-212											
165430	26 25	81 45	270	36	5.1	769	731	23	17.3	35.1	928.5	-0.5
	3rd leg at 2500' TK 270 165405 - 170200											
	216-218 PS flick											
	climb to 7K level at 7K 170555											
	1. heading down coast for Doppler done with down coast run at 170850											
	Doppler run up coast 171020 - 171520											
171700	26 25	81 84	270	99	4.6	2232	2194	13.2	5.8	26.6	78260.5	
	4th leg at 7000' TK 090 171635 - 172330											
	descend to 500'											
	172730 level at 500'											
⑤ 172830	26 24	81 48	270	31	5.1	136	138	29.0	19.5	33.0	997.0	-0.6
	1st leg 500' TK 270 172740 - 173510											
	207-213											
174030	28 21	81 85	95	70	5.5	300	286	28.1	18.1	37.6	978.8	-0.9
	2nd leg 1000' TK 090 173900 - 174640											
	205-208											
175130	26 14	81 45	268	35	4.5	779	744	23.2	18.4	32.3	926.9	-0.3
	3rd leg 2500' TK 270 175030 - 175830											
	207-212											
	4th leg 7000' TK 090 180200 - 181000											
	225-229											
180450	26 23	81 75	88	82	5.6	2204	2107	13.8	5.6	34.5	784.5	0.1
	descend to 500'											
	181410 level at 500'											
⑥ 181530	26 24	81 49	269	15	5.4	140	141	30.0	19.4	39.5	996.0	1.5
	1st leg 500' TK 270 181410 - 182150											
	right camera malib, will replace right camera with downwind camera											
	203-208											
	2nd leg 1000' TK 090 182450 - 183320											
	208-213											
182740	26 23	81 76	89	65	4.6	301	291	28.4	18.0	38.9	978.3	-1.6
	3rd leg 2500' TK 270 183730 - 184510											
183800	26 24	81 43	270	60	2.8	800	763	23.4	18.5	34.9	925.2	-0.5
	208-212											
	4th leg 7000' TK 090 184930 - 185730											
	220-224											
185050	26 24	81 83	89	90	5.6	2260	2153	14.3	3.7	27.0	777.0	1.5
	descend to 500'											
	190140 level at 500'											

TIME	LAT	LONG	TK	WD	WS	RA	PA	TA	TD	SST	PS	FWE
⑦	1st leg	500	TK	270		190140	140	-	190930			
190250	26 24	81 48	269	17	3.0	139	148	29.9	18.8	40.9	9860	-1.2
	204-207											
	2nd leg	TK	090	1000'		191320		-	192140			
	205-209											
191530	26 24	81 79	87.7	76.5	5.0	300	294	29.0	18.2	34.9	9776	-1.2
	3rd leg	TK	270	2500'		192510		-	193245			
192730	26 24	81 57	268	11.3	5.3	805	770	24.0	17.7	32.8	9234	-0.3
	203-206											
	4th leg	TK	090	7000'		193715		-	194510			
	220-222											
193840	26 24	81 85	88.5	78	6.4	247	214	23.7	6.8	32.1	781.0	0.4
	Descend to 500' level at 500'											
⑧	1st leg	TK	090	500'		194945		-	195730			
195030	26 23	81 46	269	25	3.6	146	154	30.3	19.3	37.5	995.7	1.2
	202-205											
	2nd leg	TK	270	1000'		200130		-	200950			
200530	26 23	81 68	88.5	56	3.1	290	293	29.1	17.7	40.5	9786	2.6
	205-208											
	3rd leg	TK	090	2500'		201400		-	202130			
201640	26 23	81 60	269	25	5.5	805	766	24.4	17.4	35.8	994.4	-0.5
	209-213											
	4th leg	TK	270	7000'		202555		-	203330			
202950	26 23	81 67	91	98	3.7	2208	2118	14.2	6.3	32.0	783.1	0.5
	224-227											
	descend to 500' level at 500'											
	at I.P. 203820											
⑨	1st leg	TK	270	500'		203820		-	204605			
203900	26 23	81 45	269.5	87	5.0	146	157	29	20	34.2	994.4	0.3
	211-216											
	wind L 1000'											
	204700 - 204900		TK	270		330/5	205		325/5		204	
	205000 - 205200		TK	180		300/5	204		310/5		205	
	205340 - 205540		TK	360		360/5	203		350/3		205	
	205640 - 205840		TK	090		320/2.5	203		330/2.4		201	
	2nd leg	TK	090	1000'		210000		-	210840			
210140	26 23	81 84	93	070	3.0	299	301	29.6	19.0	36.7	9726	-1.2
	205-207											
	3rd leg	TK	270	2500'		211300		-	212040			
211750	26 23	81 73	268	17	6.0	777	753	25	18	31.6	974.9	-1.0
	205-207											
	Climb to 7000 and tk 180 for down coast Duppler level at 212320 - 212900											
	run up the coast for Duppler											
	213130 - 213910											
	4th run	TK	090	7000		214030		-	214600			
214230	26 22	81 66	86	110	3.3	2209	2120	13.6	9.8	28.7	782.9	0.9