19820812I1_FDIR

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.: 53-82
FLIGHT ID: 820812I
DATE: AUG 12, 1982

TAKE OFF (City or airport)	LAND (City or airport)	ALTITUDE
MIA	MIA	18K 1K

PURPOSE: SEA-BREEZE #3

PROPOSED TAKEOFF TIME:	1630	PROPOSED FLIGHT DURATION:	5.5 HR
TIME IN:	2225	TIME ON:	222033
TIME OUT:	1640	TIME OFF:	1650
BLK. TIME:	5.8	FLIGHT TIME:	

FLIGHT PERSONNEL

OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
TICKNOR	FLEURY	HAYDU	STONE	McFADDEN	JACK
MANDELKERN		PARADIS		JORGENSON	CHENG
NELSON		SCHRICKER		MARKS	BELLE
RICCI		GOLDSTEIN		FARR	FEINBERG

PROPOSED MISSION: Fly to I.P. descend to 1K' and fly to open water, Do wind L, Climb to 18K & drop ODW. Descend to 1K and fly larg L from IP to 5 miles over water & down coa[st] 20 miles. Box convective elements as they [illegible]

ACTUAL MISSION AND REMARKS

DATA COLLECTED AND REMARKS

1 SLOW
9 RADAR
10 DOPPLER

2 P/O 1 RFC 1 NHRL 1 ODW

CAM R, L, F, D

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
Tichnor	NELS.	NOAA 43.	820812	1650	N25 48.2 W080 17.6	12 Aug 82	Sea Breeze Mode

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
1640	N25 48.2 W080 17.6	4	Some .3 .6		Some		BIK out KMIA.
164909	N25 48.0 W08017.9	4	48.2 17.9		48.0 18.0		T/O Rwy 9L. 089.4°T
171029	N26 09.5 W081 15.4	4	N 26 09.8 W081 14.8		N 26 10.1 W081 15.0		Alley Alley Bend
1840N	N 26 09.4 W	4	N 26 10.2 W081 21.6	-0.8	N 26 11.0 W 081 21.8	-1.6	For LAT ✓ Alley Alley
184514	N26 09.4 W	4	N 26 10.1 W 081 37.0		N 26 10.9 W081 37.2		"
184750	N26 17.9 W081 35.7	4	N 26 18.9 W 081 34.9	-1.0 +0.8	N 26 19.8 W 081 35.0	-1.9 +0.7	1/4 N of Cypress Rd 9° Turn
191356	N26 21.9 W081 35.7	4	N 26 22.5 W 081 35.0	-0.6 +0.7	N 26 24.5 W081 35.3	-2.6 +0.4	Bunker Hills West. Rd Turn
194646	N26 17.6 W081 35.7	4	N 26 18.2 W081 34.2	-0.6 +1.5	N 26 20.7 081 34.8	-3.1 +0.9	Cypree Rd Junct.
204101	N26 27.2 W081 34.0	4	N 26 27.7 W 081 31.8	-0.5 +2.2	N 26 32.7 W081 32.2	-5.5 +1.8	
213339	N 26 45.9 W 081 23.0	4	N 26 46.3 W081 21.0	-0.4 +2.0	N 26 52.6 W081 20.9		Labelle Rd. Rd. E.
220859	N 26 20.0 W080 46.3	4	N 26 20.0 W 080 43.7	0.0 +2.6	N 26 28.6 W 080 43.2		Pump Sta. & Pipeline
222033	N25 480 W080 18.0	4	N 25 48.1 W 080 15.1	+3.	N 25 57.0 W 080 14.5		9L Ldg.

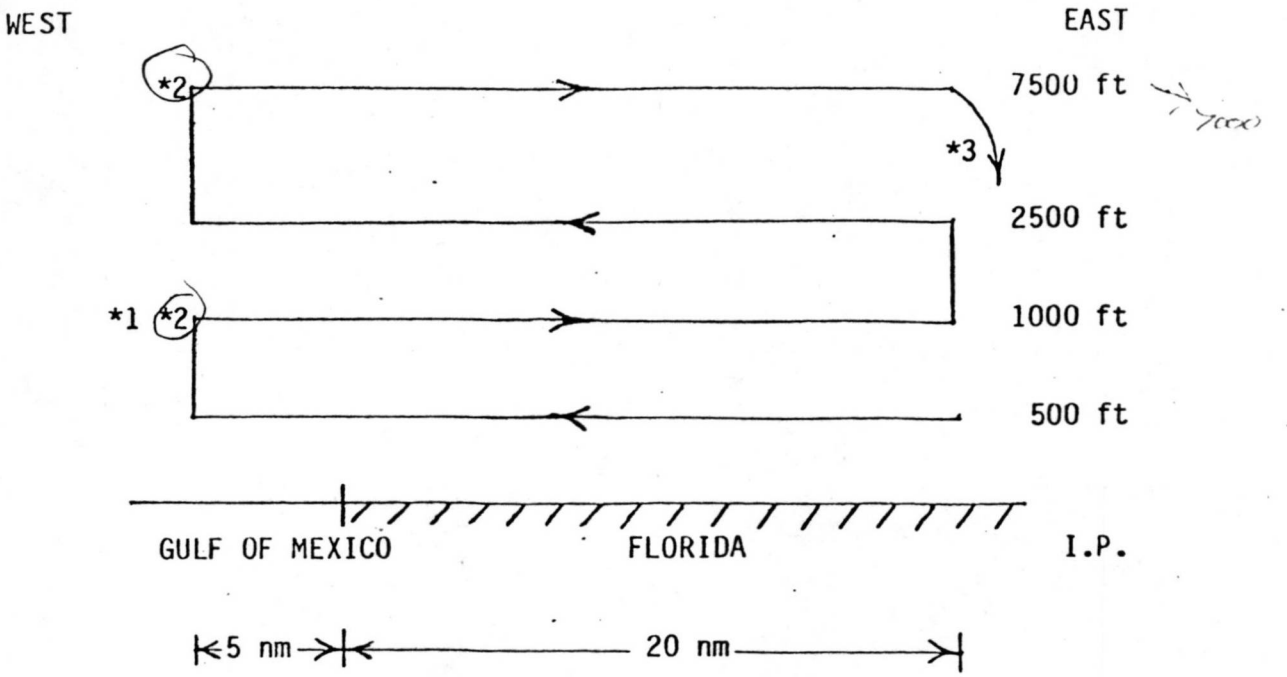
SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE / ELAPSE ALIGN POST TIME	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	Δ T (2)(1)	TERMINAL ERRORS LAT	LONG	G S
INS 1	1538	Y	OSC		5	1600	2225	5.8	-0.1	+3.0	3.0
INS 2 or IMU	1538	Y	OSC		5	1600	2225	5.8	-9.1	+3.6	3.0

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

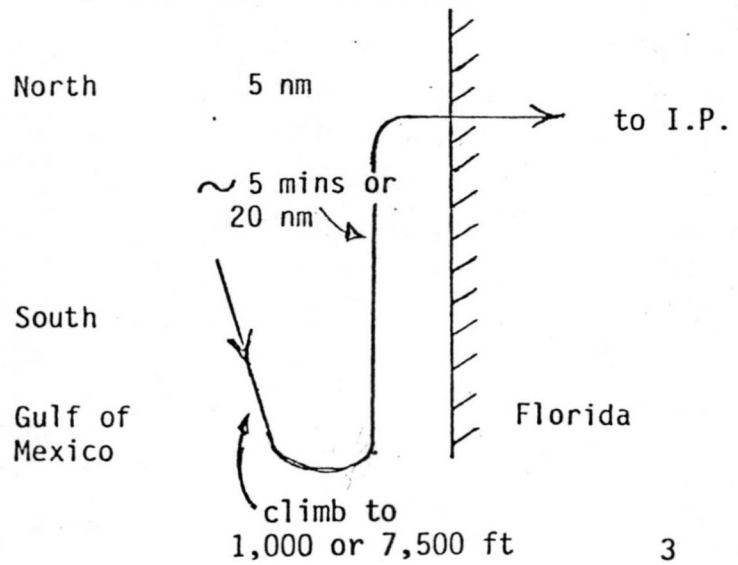
TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
2225	N25 48.2 W080 17.6	4.	N25 48.3 W080 14.6	-0.1 +3.0	N 25 57.3 W080 14.0	-9.1 +3.6	DIF RGS 1 2.0 2 3.0



*1 There will be a wind calibration L over the Gulf just before the first and last west-east flight legs at 1000 ft.

*2 After deep convection (at least cumulus congestus) begins to form and if the Doppler system is working properly, there will be a 5 minute leg from south to north along the coast, but over the Gulf. This leg should be approximately perpendicular to the east-west flight legs and VFR. Hopefully the south-to-north leg will be less than 5 nm from the coastline and not more than 10 nm from the deep convection in the sea-breeze convergence zone. The heading should remain constant for a particular leg, and, at the convenience of the aircraft commander, within the range of 345-360° (true).

*3 Temperature and dew-point temperature sounding data will be obtained during aircraft descent near the initial point. The pilot should try to stay as far away from clouds as possible during the descent. The descent should take 2-3 minutes.



aug 4 W.W.

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

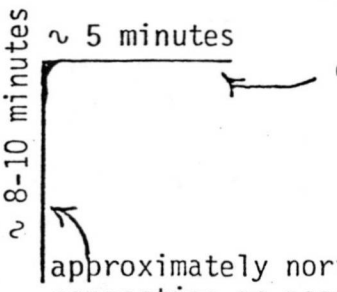
Location of experiment: Naples area

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

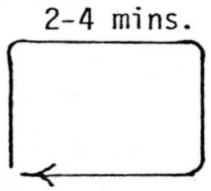


The precise location of the L may vary with time. The pattern may be flown in either direction.

approximately north-south and as close to the convection as possible - perhaps over land

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.

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(2-72)

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TIME	LAT	LON	TK	WD	WS	RA	PA	TA	TD	SST	PS	SP	FWZ
	alt	30,11	(000)10		(-160)92			(1019)	PS →		30.09		
	NAV 2												
			1645		Block								
1649	25 80	80 29	024	099	5,0	—	49						
		TAS appear about 10 KNOTS to [illegible]											
1713	at IP point at 1000'												
	171300 —												
171630	26 24	81 68	271	290	4,0	307	267	27,3	20,4	31.9	981	1016	1.[illegible]
wind L													
	171930 — 172100			TK 270				270/3					
	172250 — 172420			TK 090				150/1.0					
	172530 — 172700			TK 180				253/2.0					
	172900 — 173030			TK 360				258/1.5					
	ODW #1		175348			Randy hit in leg							
	about 6 high					on landing							
	descend to 1000'												
182130	26 01	81 81	163	230	2,4	326	284	26.2	19.6	30.3	979.5	1016	-0.2
	SP is about 2-3 Mbs low												
	start run up the coast as part of												
	the L at 1000' feet												
	FWZ looks real good												
182650 — 183130													
	PQ(TAS) appears to be 3 knots to high												
183300 — 183855			TK 090 to IP										
183440	26 25	81 69	84	277	5,3	324	284	27.7	20.5	33.6	979.7	1015	1.3
		lox convective element #1											
183938 — 184050			TK 180										
184140 — 184420			TK 270			bad side for [illegible]							
184505 — 184705			TK 360										
184750 — 185035			TK 090										
184800	26 33	81 56	90	213	2.0	324	283	28.1	20.0	30.2	979.6	014	0.3
185121 — 185314			TK 180										
185402 — 185700			TK 270				PQ (TAS) perfect at 185320						
185520	26 14	81 48	268	227	5.0	319	285	27.7	21.3				
185750 — m			TK 360										
190048 — 190305			TK 090										
190400 — 190544			TK 180										
190628 — 190920			TK 270										
190958 — 191304			TK 360										
191120	26 26	81 63	01.5	243	4.3	318	287	27.9	21.1	31.5	979.8	014	-0.2
191400 — 191640			TK 090										
	ALT	30.08											
191720 — 192030			TK 180										
192132 — 192419			TK 270										
192501 — 192830			TK 360										
192510	26 15	81 63	1.5	257	4.3	314	283	27.4	20.0	29.7	980.0	015	-0.3
192912 — 193235			TK 090										
193325 — 193817			TK 180										

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TIME	LAT	LON	TK	WD	WS	RA	PA	TA	TD	SST	PS	SP	FWZ
193902 – 194158 TK 265													
194244 – M TK 360													
194310	26 08	81 57	359.5	36.0	4.4	314	282	27.2	19.8	30.3	979.5	015	0.0
M – 195105 TK 090													
195147 – 195651 TK 180													
195200	26 27	82 26	178	325	0.9	309	281	28.1	20.9	29.9	979.4	014	0.2
	go to IP point and start L pattern												
	200530 – 201200 TK 270												
	201310 – 201610 TK 340												
201500	26 41	81 95	341	276	3.3	319	283	26.9	20.4	28.9	979.5	015	0.0
	201753 – 202217 TK 135												
	202430 – 202528 TK 090												
	202620 – 202744 TK 360												
	202832 – 203028 TK 270												
	203115 – 203242 TK 180												
	203333 – 203531 TK 090												
	203845 – 204015 TK 360												
	204057 – 204240 TK 270												
204115	26 46	81 54	269	189	6.9	304	279	27.9	20.0	28.5	979.9	013	-0.4
	204331 – 204455 TK 177.9												
	2045M – 204749 TK 090												
	204840 – 205237 TK 360 → 335												
	205455 – 205717 TK 270												
	205800 – 210110 TK 180												
205815	26 53	81 68	178	285	3.7	309	282	27.5	18.5	31.9	979.2	014	1.[illegible]
	210155 – 210502 TK 090												
	210548 – changing TK 360												
	~~———~~				vctur ration								
	210945 – 211230 TK 270												
	211459 – 211751 TK 186												
	211975 – 212135 TK 090												
	212158 – 212721 TK K049										315			
212630	26 59	81 24	53	299	8.6	316	287	25.6	21.0	28.1	979.9	014	-0.5
	212830 – 213115 TK 309												
	213344 – 214020 TK 232												
2137	26 60	81 53	234	150	4.9	312	283	311	284	289	979.6	014	-0.1
	214115 – 214319 TK 143												
	214415 – 214907 TK												
214830	26 48	81 35	54	285	4.8	307	284	25.3	20.9	26.4	979.1	014	0.0
	215030 – 215605 TK 146												
	215644 – 220045 TK 056												
	220130 – 220440 TK 336												
	220615 – 220933 TK 160												

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