E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

_____ 1. Participate in general mission briefing.

_____ 2. Determine specific mission and flight requirements for assigned aircraft.

_____ 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist and CARCAH unless briefed otherwise by field program director.

_____ 4. Contact HRD members of crew to:

a. Assure availability for mission.
b. Arrange ground transportation schedule when deployed.
c. Determine equipment status.

_____ 5. Meet with AOC flight crew at least 90 minutes before takeoff, provide copies of flight requirements, and provide a formal briefing for the flight director, navigator, and pilots.

_____ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 In-Flight

_____ 1. Confirm from AOC flight director that satellite data link is operative (information).

_____ 2. Confirm camera mode of operation.

_____ 3. Confirm data recording rate.

_____ 4. Complete Form E-2.

E.2.3 Postflight

_____ 1. Debrief scientific crew.

_____ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).

_____ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

_____ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.

_____ 5. Determine next mission status, if any, and brief crews as necessary.

_____ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

_____ 7. Prepare written mission summary.

On-Board Lead Project Scientist Check List

Date 9/19/02 Aircraft 43RF Flight ID 020919I

T.S. ISIDORE – Pre Storm II

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	P. Black	Flight Director	R. Damiano
Cloud Physics	—	Pilots	D. Tenessen, H. Halvorsen
Radar	P. Dodge	Navigator	I. Adler
Workstation	P. Dodge	Systems Engineer	T. Lynch, J. Smith
~~Photographer~~/Observer (SCR GPS)	E. Walsh	Data Technician	D. SanSouci
~~Omegasonde~~		Electronics Technician	R. Jong
AXBT/AXCP/Guest	Lt. Shay, T. Cook, S. Guhin	~~Other~~ Flight Eng.	J. Curry

Take-Off: 1606Z Location: MAC Dill

Landing: 2240Z Location: MAC Dill

Number of Eye Penetrations: ____

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
19/1139Z	1954	8055	990	61kt GPS drop
19/1942Z	2029	8151	980	74kt SFMR

C. Mission Briefing:

D. Equipment Status (Up, Down, Not Available, Not Used)

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft	✓		
Radar/LF	✓		
Radar/TA (Doppler)	✓		
Cloud Physics	—		
Data System	✓		
~~Omega~~GPS sondes	✓		
AXBT/AXCP	✓		
Workstation	✓		
Videography	✓		

REMARKS:

Lead Project Scientist Event Log

Date 9/19/02 Flight 020919I LPS P. Black

turn pt		Time	Event	Position	Comments
(1)	1.	163812	GPS1, BT12 [1]	2558 8312	GPS winds, BTH good SST = 29.0
	2.	164212	BT16 [2]	2543 8315	SST = 29.2
	3.	164620	BT12 [3]	2527 8319	SST = 29.1
	4.	165012	BT16 [4]	2510 8322	SST = 29.1
	5.	165411	BT12 [5]	2455 8324	fail - no sig
	6.	165815	BT16 [6]	2434 8328	SST = 29.1
(2)	7.	170239	CTD16 ① GPS2	2420 8332	GPS winds, BTH good CTD noisy
	8.	170800	CP14 ②	2408 8350	good
	9.	171424	CTD16 ③	2353 8412	Good
	10.	172030	CP12 ④	2338 8433	Good
	11.	172608	CTD14 ⑤ BT12 [7] GPS3	2325 8450	GPS winds, BTH good SST = 29.0, CTD good, MLD = 60m
	12.	173233	CP16 ⑥	2310 8512	
	13.	173823	CTD12 ⑦	2255 8531	
	14.	174427	CP14 ⑧	2241 8551	switched antenna's to - better real time processing - more noise
	15.	175033	CTD16 ⑨	2226 8611	
(3)	16.	175746	turn CP12 ⑩ GPS4	2212 8634	winds good
	17.	180208	BT16 [8]	2222 8648	SST = 29.2 MLD ≈ 20 m
	18.	180600	BT12 [9]	2232 8659	SST = 29.0 very noisy
(4)	19.	181112	BT16 [10] GPS5	2245 8709	winds good SST = 29.1 MLD = 25m
	20.	181726	CTD14 ⑪	2258 8651	SFMR reading low - 4 kt sea state looks like 12 kt
	21.	182348	CTD12 ⑫	2312 8632	

2817 8147 1745Z center fix

Lead Project Scientist Event Log

Date 9/19/02 Flight 020919I LPS P Black

	Time	Event	Position	Comments
22.	183020	CP14 (13)	2726 8613	
23.	183640	CTD16 (14)	2740 8555	
24.	184302	CP12 (15)	2352 8536	
25.	184950	CTD14 (16)	2406 8517	$D_{26} = 160$
26.	185420	CP16 (17)	2420 8458	
27.	190257	CTD12 (18)	2434 8437	
28.	190914	CP14 (19)	2447 8418	
(5) 29.	191625	CTD16, (20) ~~GPS7~~	2504 8400	sonde not ready (DB)
~~30.~~	191857	GPS7	2513 8403	
30	192104	BT12 ~~(11)~~ (11)	2521 8405	SST = 28.8
31.	192514	BT16 (12)	2536 8406	SST ~ 28.8
32.	193100	BT12 (13), GPS8	2553 8420	SST = 27.3 MLD = 30m
~~33.~~	193705	CP16 (21)	2539 8438	
34.	194231	CTD14 (22)	2525 8455	
35.	194912	CTD12 (23)	2508 8516	
36.	195524	CP14 (24)	2451 8536	
37.	200130	CTD16 (25) GPS9	2437 8555	good winds, BTH
38.		CP12 (26)		hung on sfc - bad
39.	201407	CTD14 (27)	2405 8633	D26 = 85m
40.	202040	CP16 (28)	2348 8455	
41.	202644	CTD12 (29)	2332 8713	

187 2026 8139 987 mb

~~AFT~~ ~~CO~~ 874-7-6183-9234 42 call

3 of

Lead Project Scientist Event Log

Date 9/19/02 Flight 020919I LPS R. Black

	Time	Event	Position	Comments
(6) 42.	203353	BT16 14 GPS10	2318 8735	wind, PT4 good SST = 29.3 MLD = 30 m
43.	203805	BT12 15	2328 8749	good wrong channel not recorded on AO copy?
44.	204107	BT16 16	2336 8759	SST = 29.3
(7) 45.	204610	BT12 17 GPS11	2350 8810	wind, PT4 good
46.	205040	BT16 18	2400 8758	did not fire - hung in tube
47	205647	CP14 (30) BT12 19	2415 8739	SST = 28.5 1 BT16 left
		work station down - no comms with AVAPS		
		only 3 probes sent out from early in flt		
48.	210348	CTD16 (31)	2430 8719	
49	211114	CP12 (32)	2448 8657	noisy
50.	211836	~~CP14~~ CTD16 (33)	2505 8636	failed
51.	212540	~~CP12~~ CP14 (34)	2521 8615	
52.	213200	CTD16 (35)	2538 8554	
53.	214014	CP12 (36)	2554 8533	
54.	214719	CTD14 (37)	2610 8512	
55.	215428	CP16 (38)	2626 8450	
56	220058	CTD12 (39) BT16 20	GPS12 2640 8430	
			good probes:	16 of 18 CP's worked
				20 of 21 CTD's
				18 of 20 BT's
				old probes worked first

Ray Long

12/5

97

1942 2029 8151 76 kt N quad 984 mb

212 20.6 82.0 MAX SFWS = 37 m/s 980 72 kt

NHC hurricane at 212