

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 9/18/02 Aircraft 020918 I Flight ID N43RT

A. Participants: T.S. Isidore & Pre-storm AXCP/CTD survey

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>B. Black</u>	Flight Director	<u>B. Damiano</u>
Cloud Physics	<u>---</u>	Pilots	<u>D. Tenneson, B. Halvorsen, T. Strong</u>
Radar	<u>---</u>	Navigator	<u>D. Adler</u>
Workstation	<u>---</u>	Systems Engineer	<u>T. Lynch / J. Smith</u>
^{SCR} Photographer/Observer	<u>E. Walsh</u>	Data Technician	<u>D. Sansouci</u>
^{GPS} Omegasonde	<u>---</u>	Electronics Technician	<u>---</u>
AXBT/AXCP/Guest	<u>M. K. Shea</u>	^{Flight Engineer} Other	<u>J. Curry</u>

Take-Off: T. Cook, S. 1602Z Location: Mac DiU
 Landing: _____ Location: _____ Number of Eye Penetrations: _____

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>18/1110Z</u>	<u>17°39'</u>	<u>78°30'</u>		

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	✓		
^{GPS} Omega sondes	✓		
AXBT/AXCP	✓		
Workstation	—		
Videography	✓		

REMARKS:

P1 of

Lead Project Scientist Event Log

Date 9/18/02

Flight 020918

LPS P. Black

Flight at 6,000 ft at constant FAS of 195 kts, TAS ~ 220

Drop #

Time	Event	Position	Comments
1736	begin descent to 6,000 ft		
1749	begin turn at 6,000 ft		heading SW
175157	CTD, GPS mode	2117 8036	CTD, GPS mode
175801	good, good	2103 8057	good winds; PTH
175801	CP - good sig	2103 8057	bad data - very noisy
1805	CTD - good sig	2046 8123	good data
181043	CP - good sig	2035 8142	good data } trouble with
181735	CTD - good sig	2020 8205	good data } support software
182337	CP - good sig	2006 8226	good data
182956	CTD - good sig	1951 8249	good data
183630	CP - good sig	1937 8309	good data pitch ~ 3.4°
184245	CTD	1923 8330	220 kts TAS
184910	CP	1909 8357	
185545	CTD	1855 8414	serial data on AOC
190230	CP ^{good} sig - hung	1840 8435	bad - no data
190855	CTD	1825 8456	
191519602	CP, mode	1814 8519	wine bridge at 200 m due to current
192105	CTD	1828 8532	turn then CP
192630	CTD	1844 8546	heading NW
193647	CTD mode	1803 8558	data system freeze
193806	CP	1905 8555	time on data system wrong

OK CTD

3.4°
pitch at
195 kts
FAS

due to current
near 200 m
80 cm/s

delay due to tape chg

Pt 1

2

3

4

5

6

7

8

9

10

X 11

X 12

13

Pt 2

15

16

Pt 3

hdg ME

Lead Project Scientist Event Log

Date

9/18/02

Flight

020918F

LPS

P. Black

	Time	Event	Position	Comments
18	184254	CTD	1915 8540	D26 ~ 145m
19	194637	CP	1930 8519	left TV monitor
20	195238	CTD	1943 8500	failed - loose wire; fixed
21	195900	CP	1956 8439	
22	200555	CTD	2010 8418	
23	201210	CP	2022 8359	
24	201845	CTD	2035 8346	
25	202639	CP	2048 8319	
pt 4	203235		turn to NW	
26	203300	CTD	2104 8302	D26 ~ 150m MED ~ 75m
27	203713	CTD	2113 8316	
28	204235	CTD	2124 8332	D26 ~ 110m, MED ~ 20m 55% RH at FL
pt 5	204713	turn to SW	2135 8346	$T_D = 9^{\circ}\text{C}$ $T_w = 17^{\circ}\text{C}$
29	204825	CP, GPS on deck	2134 8351	
30	205304	CTD	2124 8407	
31	205820	CTD	2113 8426	
32	210405	CP	2101 8446	
33	210905	CTD	2051 8504	
34	211415	CP	2040 8522	
35	211930	CTD	2029 8539	
36	212520	CP	2017 8559	

Date 5/18/02

Flight 020918I

LPS *P. Black*

[illegible]