

030902I

CBLAST

Fabien

**E.2 Lead Project Scientist****E.2.1 Preflight**

- MB 1. Participate in general mission briefing.
- MB 2. Determine specific mission and flight requirements for assigned aircraft.
- MB 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- MB 4. Contact HRD members of crew to:
- Assure availability for mission.
  - Review filed program safety checklist
  - Arrange ground transportation schedule when deployed.
  - Determine equipment status.
- MB 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- MB 5. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
- MB 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami).
- \_\_\_ 7. *Before take-off*, brief the on-board GPS dropsonde operator on times and positions of drop times.
- \_\_\_ 8. Perform a radio check with headsets. Make sure everyone's headsets is work properly.
- \_\_\_ 9. Collect "mess" fee (\$2.00) from all on-board HRD flight crew members

**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.
- \_\_\_ 5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

**E.2.3 Post flight**

- \_\_\_ 1. Debrief scientific crew.
- \_\_\_ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- \_\_\_ 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 MGOC as to where you can be contacted and arrange for any further coordination required.
- \_\_\_ 7. Prepare written mission summary using form E-2 p.3 (due to Field Program Director 1 week after the flight).

2,38,34

Lead Project Scientist Check List

Date 9-2-03 Aircraft 43RF Flight ID 030902I

A. —Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Michael Black</u>	Flight Director	<u>Barry Dymally</u>
Cloud Physics	<u>Eric Ohlson</u>	Pilots	<u>Rebeck Strong</u>
Radar	<u>Rob Rogers</u>	Navigator	<u>John Adler</u>
Workstation	<u>Chris Lindgren</u>	Systems Engineer	<u>Dewie</u>
Photographer/Observer		Data Technician	<u>Ray Tones</u>
Dropwindsonde	<u>Chris/Rob</u>	Electronics Technician	<u>Terry Lynch</u>
AXBT/AXCP/Guest	<u>Eric</u>	Other	<u>BAT-Jeff French</u>

Take-Off: 1434 Location: St. Croix Landing: 0015 Location: St. Croix

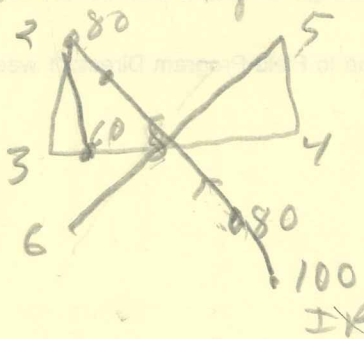
Number of Eye Penetrations: \_\_\_\_\_

B. —Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

C. —Mission Briefing:

IP 100 nmi SE of eye  
coordinated leg with 42 80 mi out - 43 @ 8,000 ft  
First pass through SE-NW @ 8,000 ft 42 @ 12,000 ft  
Coordinated drops (4 each leg 43, 8 each leg 42)  
if OK @ 8,000 ft - try to descend to 5,000 ft  
with 60 miles legs - finish butterfly rotating 60° downwind  
before next pass through. Next, find clear area  
in SE quad with 35-50 kts  
for first of 2 step descent  
upwind → downwind  
2400', 1200', 900', 600', 400', 200'  
repeat for crosswind  
Second step descent





D. — Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# of DATs or Expendables
Aircraft	✓	✓		
Radar/LF	✓ JCF OK	✓		
Radar/TA (Doppler)	✓ TA Noisy	✓		
Cloud Physics	✓	✓		
Data System	✓	✓		
GPS sondes	✓			
AXBT/AXCP	✓			
Workstation	?			
Videography	✓			

REMARKS:

Fabran

Pg 1

Lead Project Scientist Event Log

Date 9/2/03 Flight 030902I LPS m. Black

Time	Event	Position	Comments
1434	Takeoff	St. Croix	
1506	Begin box patten for BAT Calibration		6000 ft
1518	Finish Box patten		
1520	Back on IPPS Footing		
1534	Outer convective band	130 SW of ctr	
1536	SFMR -	20-25 m/s in band	
1539	Along convective band	40-50 dBZ	
1540	Crossing convective band		
1602	~60 miles south of eye	~40 mile diameter	
1609	at IPP -	50 nm SE of ctr	
1610	Slow turn to head in bound		
1615	Heading in bound	TRK 315 - SE of ctr	
1618	turned around to wait for 42-AVAPS		problem
1629	Possible space for step descent		
1643	Radar Present -		
1647	Radar up		
1712	TP TRK 315 to eye - SW of		
171447	Drop #1	~25 miles from RMY	
171553	Drop #2	~21 mile from RMY	
171650	Drop #3		
171749	Drop #4		
1722	RMW - flight level 110 - HKTS Broad max		
1723	SFMR max ~100 KTS		
1724	in eye - circling awaiting 42		to fix RWR
1802	Tracking	315° through NW	
1804	Drop #5		
180420	Drop #6		

15° 30'  
E 0° 11'  
180140 Drop #7  
180010 Drop #8

1718 - RF  
2029' ~ Gdx  
60'44' ~  
948 mb



Pg 2

Lead Project Scientist Event Log

Date 9/2/03 Flight 030902I LPS m, 1810k

Time	Event	Position	Comments
1814	50 miles NW of ctr	turn to W	
1821	50 miles west of ctr		
1822	Inbound from west		
1825	Drops 9-12 west eyewall	- 115 kts	
1833	In eye		
1840	receive BTs		
1851	Quarantine down		
1906	Still circling		
1907	Radar down		
1911	42, and aircraft in ctr		
1919	Radar up - No Test		
1927	Tracking 315 out of eye	- 110 kts	
1928	entering NW eyewall		
1930	- AXBT		
	Drops 8-12		
1934	AXBT		
1940	End of AXBT leg		
1950	Turn into eye from SW		
195524	Drop 13	215 miles out from SW	
195624	Drop 14		
195720	Drop 15	west side	
195754	Drop 16		
200000	In eye		
200130	Circle 20.58 60 deg - circling		
201320	Tracking 95° <del>22</del> eyewall NE	- 119 kts	
201730	Drop 17	- 120 kts	
201800	Drop 18	121 kts	

201900 Drop 19 110 kts  
202000 Drop 20 110 kts

2  
BTs  
L

110 kts  
V



Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight \_\_\_\_\_ LPS \_\_\_\_\_

Time	Event	Position	Comments
20300	Descend to 2500'		
203753	2500' Begin upwind leg - Trk 171°		
2049	Turn right Descend to 1200'		Wind 1720
2051	Downwind 1200'		
205642	End 1200' - descend to 900' - 60-70 kts		
210000	900' Trk 165° upwind - 60 kts		
210700	600' Trk 350° downwind		
210900	600' Trk 345° upwind - 50 kts		
211430	End 600' - right turn - descend to 400'		
211700	400' downwind leg 55 kts		
212430	End 400' run - right turn		
212700	200' slow down		
213700	ascend to 2500'		
2133	right turn to begin crosswind		
214120	Crosswind 2500'		
214409	Turn left descend to 1200'		
214600	1200' Crosswind leg Trk 255°		70 kts
215204	reverse course to 900'		
	Trk to west		
	ending crosswind at 900'		
	because of dusk		
215400	900' crosswind inbound Trk 70°		
215935	End 900' leg - right turn, climb		
2216	East eye wall 125 kts		
2220	Eye Drop 20.8361.24		
22218	Trk 225° - exit to southwest		

Storm 2231.  
moving 3060

944 mb

223100 - climb to 16,000 ft  
Hdg for Sta. Credit