

## Lead Project Scientist

Storm or Project EARL 2010 Experiment name IPEX  
Flight ID 100902HI Mission ID WX07A EARL10

### Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft.
3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.
4. Contact HRD members of crew to:
  - a. Assure availability for mission.
  - b. Review field program safety checklist
  - c. Arrange ground transportation schedule when deployed.
  - d. Determine equipment status.
5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
6. 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.
7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.
8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
9. Make sure each HRD flight crew member has a life vest.
10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

### 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 Lead Project Scientist Form.
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).

### Post flight

1. Debrief scientific crew.
2. Gather completed forms for mission and turn in to data manager at HRD.
3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
5. Obtain a copy of serial flight data on thumb drive. Turn in with completed forms.

[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
9. Prepare written mission summary using **Mission Summary** form.

**Lead Project Scientist Check List**

Storm or Project EARL 2010 Experiment name IFEX

Flight ID 100902H1 Mission ID WX07A EARL10

**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	_____	Flight Director	<u>SEARS, DAMIANO</u>
Radar/Workstation	_____	Pilots	<u>NEWMAN, MARTIN, SWEENEY</u>
	_____	Navigator	_____
Cloud Physics	_____	Systems Engineer	_____
Photographer/Observer /Guests	_____	Data Technician	_____
Dropwindsonde	_____	Electronics Technician	_____
AXBT/AXCP	_____	Other	_____

**B. Take-off and Landing Times and Locations:**

Take-Off: 075200 UTC Location: MACDILL

Landing: 140/30 UTC Location: MACDILL

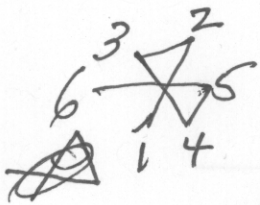
Number of Eye Penetrations: \_\_\_\_\_

**C. Past and Forecast Storm Locations:**

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

**D. Mission Briefing:**

FLY 105 NM BUTTERFLY PATTERN  
DROPS AT 6 CORNERS AND AT MAX WINDS



Lead Project Scientist Event Log

Date SEP 02, 200 Flight ID 100902H1 LPS GAMACHE

Time	Event	Position	Comments
075210	T/O	MACDILL	
091405	POINT 1 DROP	27°57' 75°14'	COMBO DROP
092255	BT DROP	28°34' 74°51'	
0929		28°0' 74°39'	PILOTS SAY YOU CAN SEE TO THE EYE CLEAR ON THIS SIDE?
max 95 kts FL 093120	SANDY "eyewall" <sup>2100</sup>	29°10' 74°35'	
093534	⊙	29°26' 74°36'	
max 130 kts FL 093954	NE eyewall	29°43' 74°27'	
0955			IAN SEAKS NOTES 19°C at 12000 PA high the's seen so far by 3°C
100158	DROP at PA 2	31°4' 73°44'	COMBO DROP
(011)			WESTWARD DOWNWARD LEB LARGE DEEP (12+ km) stratiform precip plenty scatterers
102602	COMBO DROP PT 3	30°57' 75°47'	065/50
103907	BT drop	30°24' 75°5'	078/64 FL
104715	NW eyewall drop	29°56' 74°47'	No launch detect
104802	" " "	29°52' 74°45'	
104944	⊙		
1053 <del>07</del> <sup>27</sup>	DROP	29°34' 74°30'	<del>SANDY</del>
1050	<del>⊙</del> ⊙	29°46' 74°41'	350/17
1102	BT drop	29°3' 74°11'	
111520	COMBO PT 4	28°94' 73°40'	238/55

NW side  
SFM max =  
100 kts  
93 kts FL  
SE side  
82 kts  
SFM  
97 kts FL

~~350/17~~

