

Lead Project Scientist

Storm or Project EARL 2010 Experiment name IFEX/TDR
Flight ID 1008901H1 Mission ID WX07A EARL8

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

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 Flight ID 100901H1 Mission ID WX07A EARL8

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>GAMACHE</u>	Flight Director	<u>SEARS/DAMIANO</u>
Radar/Workstation	<u>GAMACHE</u>	Pilots	<u>NEWAN, SWEENEY, MARTIN</u>
		FLT ENG	<u>KLIPPEL/DARBY</u>
		Navigator	<u>BRAKOB</u>
Cloud Physics		Systems Engineer	<u>BOSKO LYNCH</u>
Photographer/Observer		Data Technician	<u>CARPENTER OLNEY</u>
/Guests	<u>UHLHORN</u>		
Dropwindsonde		Electronics Technician	
AXBT/AXCP		Other	<u>WILLIAMS CROUCH</u> <u>RICHARD WERNECKE</u>

B. Take-off and Landing Times and Locations:

Take-Off: 072325 UTC Location: BARBADOS

Landing: _____ UTC Location: MALDILL

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

MALDILL
 EARL SHOULD BE NEAR 24, 71.5 at IP.
 We will do 1 figure 4 90-270-180-0
 and go from Barbados to Mac Dill
BARBADOS. Drops at corners, and yawed, eyesounding
 on first pass.

Lead Project Scientist Event Log

Date SEP 01 Flight ID 100901H1 LPS GAMACHB

Time	Event	Position	Comments
072325	T/O	BARBADOS	
103035	Point 1/DROP	24°24' 6933'	169/75 kts
	Begin E-N leg		
1049	Outer eyewall		110 kts FL/75kts SFWR
1052	Inner eyewall		80 kts, max was in outer eyewall
105550	6 DROP	24°22' 7130'	243 mb from sound
105850	DROP		inner eyewall
1101			thought saw momentary 100 kts at FL
			90 kts on trace
			SFWR ~ 82 kts
	POINT 2		
112440	DROP	24°11' 7325'	344/44 kts
114920	DROP 3	22°48' 7142'	268/50 kts
1204	Eyewall Drop	23°41' 7148'	255/72 kts
1213	" "	24°18' 7140'	250/92 kts
1217	6	24°33' 7145'	943 mb 2.1 kts
1222	NE Eyewall Drop	24°53' 7146'	094/94 kts No laminar
1223	" "	24°58' 7146'	92/115 kts
1250	Point 4 Drop	26°34' 7151'	100/64 kts Fast Fall Max 97 kts SFWR 115 kts Max FL
1252	Point 4 Drop	26°58' 7206'	

SFWR
50m/s
95 kts

fast fall
laminar