Lead Project Scientist

Storm or Project Earl **Experiment name** RI
Flight ID 100829H1 **Mission ID** _____

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** RI

Flight ID 100829H1 **Mission ID** NOAA2 WX07A EARL2

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Gamacho	Flight Director	DAMIANO / WILLIAMS
Radar/Workstation	Lorsolo Uhlhorn	Pilots	NEUMAN, MARTIN SWEENEY
		Navigator	BRAKDA
Cloud Physics		Systems Engineer	BOSKO, OLNEY
Photographer/Observer /Guests	Uhlhorn	Data Technician	LYNCH
Dropwindsonde		Electronics Technician	
AXBT/AXCP		Other	

FLT ENG. KLIPPEL DARBY RICHARDS WARNECKE

B. Take-off and Landing Times and Locations:

Take-Off: 0804 UTC Location: Barbados

Landing: 1506 UTC Location: Barbados

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

Rotating figure-4 pattern. 105nm radial legs. Drops at 105nm and 52.5, unless moving slightly for convection. max winds. May fly a convective burst pattern.

Storm or Project Earl 2010 **Experiment name** RJ

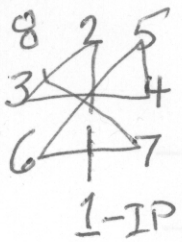
Flight ID 100829H1 **Mission ID**

E. —Equipment Status (Up ↑, Down ↓, Not Available **N/A**, Not Used **O**)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / CDs /Expendables/ Printouts
Radar/LF	✓			
Doppler Radar/TA	✓			
Cloud Physics	N/A			
Data System	✓			
GPS sondes	✓			
AXBT/AXCP	N/A			
Ozone instrument				
Workstation	✓			
Cameras				

REMARKS:

NOAA2 WX07A EARL2



Lead Project Scientist Event Log

Date Aug 29, 2010 **Flight ID** 100829H1 **LPS** Gamache

Time	Event	Position	Comments
~~BARBADOS~~	~~T/O~~		
081049	T/O	BARBADOS	
084340	CONV BAND	14°21' 57°32'	
085750	WINDS	155 5654	240/25kts
090010	IP/DROP 1	15°16' 56°48'	230/21 - Good - ONLY TO 2VE[illegible]
0908	DROP 2	15°30' 56°48'	239/24 - Good
0923	DROP 3	1656 5658	35kts max FL wind S side
0931		1735 5655	60 kts max FL WS N[illegible]
0936	DROP 4	1757 5655	63kts
0938		1808 5655	BROAD ~~DREAM~~ PEAK 60kts
0947	POINT 2/DROP 5	1843 5656	~~64/107~~ 107/64kts /SFMR 20 ~~SUN~~ PARTLY ~~SUNNY~~
			PARTLY SUNNY
0955		18°18' 57°27'	45kts both SFMR & FL
0959		18°00' 57°39'	GOING THRU GAP IN
			RAINBAND FL 35kts
			SFMR 40-47kts
102055	POINT 3/DROP 6	16°58' 58°47'	018/35kts SFMR 32
1029	DROP 7	16°58' 58°10'	340/32 BAD SONDE
1035	DROP 7a	16.58 57°47'	BAD SONDE - NO CANNOT DETECT
1042	APPROX	17° 57°15'	
1048	DROP 8	1659 5644	
1043 -	1050	RADAR DOWN	
			40kts W SIDE 62kts E side
			SFMR NEARLY SAME
1103		1659 5545	FL still 60kts, SFMR 38
1108	PT4 DROP9	~~1659~~ 17°3' 55°22'	155/56kts SFMR ~38kts

Margin notes: 986 SONDE (beside 0923); 23kts 167 (beside 0931); BAD (beside 1029–1035); 282 141kts (beside 1048)

10.42.16.5

Lead Project Scientist Event Log

Date _____ **Flight ID** 100829H1 **LPS** Camache

Time	Event	Position	Comments
1127	DROP 10	18 21 56 9	132/56 38 SFMR
~~1130~~			70 kts MAX NESE
1140	DROP 11	1744 5649	50 kts SFMR
1152			SFMR ON NE SIDE
			REACH 60 KTS AT 1147
1208	DROP 12	16°24' 58°25'	330/36
1220	DROP 13	15°47' 58°53'	300/24 kts
1252	DROP 14	15°51' 56°34'	177/32 kts ~ 40 kts SFMR
1304	DROP 15	16°29' 57°12'	
1319	DROP 16 9	17°2' 57°56'	9
1335			62 SFMR SE side
			53 SFMR NW side
1337	DROP 17	17°45' 58°57'	050/50 kts
1344	DROP 18	18°4' 59°25'	065/44
	19 ~~SONDES~~ SONDES TOTAL		
1506	LANDING	BARBADOS	

17°02'
57°58
987 mb
181/10 kts