Lead Project Scientist

Storm or Project Bertha **Experiment name** TDR
Flight ID 20140804H1 **Mission ID** 1203A BERTHA

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_____ **Experiment name**_____

Flight ID _____ **Mission ID**_____

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Uhlhorn	Flight Director	
Radar/Workstation	~~Rogers~~	Pilots	
		Navigator	
Cloud Physics		Systems Engineer	
		Data Technician	
Dropwindsonde		Electronics Technician	
AXBT/AXCP		Other	
Photographer/Observers/Guests	Midnet		

B. Take-off and Landing Times and Locations:

Take-Off: 1751 UTC Location: FLL

Landing: _____UTC Location: KMCF

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

TPR, rotated Fig-4 in H. Bertha.

~20 sondes, 10 AXBTs

Possible SFMR roll module

Lead Project Scientist Event Log

Date 4 Aug 14 Flight ID 20140804H1 LPS Uhlhorn

Time	Event	Position	Comments
1754	T/O	KFLL	
1819	Drop ①	27 10' 73 27'	IP turn North
192758	Drop ② BT ①	27 53' 73 28'	Mid pt south
			Bad BT ①
194747	Drop ③ BT ②	29 09' 73 33'	Center
			SST 28.1
	Sonde Splash		1001 mb 295/33
		EW east	
195944	Drop ④ BT ③	30 00' 73 33'	SST 28.1
200956	Drop ⑤	30 46' 73 34'	End leg ①
			turn DW to west
			of Storm
204224	Drop ⑥	29 16' 75 28'	Turn to E
205422	Drop ⑦ BT ④	29 19' 74 30'	Mid pt W
210707			SST 28.4
210707	Drop ⑧ BT ⑤	29 33' 73 30'	center 1002mb 240/34
211045	Drop ⑨	29 33' 73 15'	SST 28.1
211844	Drop ⑩ BT ⑥	29 33' 72 35'	EW EXACT
212131	Drop ⑪	29 33' 72 22'	NLD SST 28.1
213053	Drop ⑫	29 32' 71 38'	End Leg ②
			Turn DW to NE
			of Storm
215200	Drop ⑬		Turn IB to SW
220427	Drop ⑭ BT ⑦	30 27' 72 53'	Mid pt NE
220721		30 16' 73 02'	Begin turns
221252	end, begin	30°	15°
			30°

Bad → Good BT ⑥

Lead Project Scientist Event Log

Date _____ **Flight ID**_____ **LPS** _____

Time	Event	Position	Comments
221600	begin 45°		
224950	end		
221958	Drop (15) BT (7)	3020' 7313'	SST 28.2
222941	Drop (16) BT (8)	2958' 7329'	Center leg 3
225130	Drop (17)	2845 7432	
232609	Drop (18)	2913 7202	NLD
2345	Drop (19)		turn IB to NW
233710	Drop (20)	2950 7244	Mid pt IB SST 28.1
234623	Drop (21)	3014 7312	EW SE
235018	Drop (22) BT (9)	3026 7340	Center SST 28.0
000351	Drop (23) BT (10)	3110 7412	Mid pt NW
001305	Drop (24)	3140 7445	End of leg 4
	Head Home		
	Later Bertha!		

SWELL from left @ 221455
from left @ 221755