

## Lead Project Scientist

Storm or Project ERIKA Experiment name TDR  
Flight ID 05072612 2015082612 Mission ID 0305A ERIKA

### 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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**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Aberson</u>	Flight Director	<u>Sears</u>
Radar/Workstation	<u>Reason</u>	Pilots	<u>Pratt/Didier</u>
		Navigator	<u>Siegel</u>
Cloud Physics		Systems Engineer	
		Data Technician	
Dropwindsonde/DWL	<u>Bucci</u>	Electronics Technician	
AXBT/AXCP		Other	<u>Klippel Lalonde Kahn Noeher Peck Smith</u>
Photographer/Observer s/Guests			

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

Take-Off: 1655 UTC Location: Barbados

Landing: 2326 UTC Location: Barbados

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

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

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>17:50:59</u>	<u>15 59</u>	<u>58 35</u>	<u>1008mb</u>	<u>5kt FL 54mi RMD 29kt SEMR 46mi RMD</u> 327/11
<u>19:14:26</u>	<u>16 12</u>	<u>58 43</u>	<u>1007mb</u>	<u>32kt FL 84mi RMD 27kt SEMR 83mi RMD</u> 386/14
<u>20:20:53</u>	<u>16 31</u>	<u>58 49</u>	<u>1006mb</u>	<u>36kt FL 67mi RMD 27kt SEMR 61mi RMD</u>
<u>21:49:33</u>	<u>16 24</u>	<u>59 05</u>	<u>1006mb</u>	<u>36kt FL 67mi RMD 27kt SEMR 40mi RMD</u>
<u>22:36:43</u>	<u>16 16</u>	<u>59 04</u>	<u>1006mb</u>	<u>36kt FL 67mi RMD 27kt SEMR 07mi RMD</u> 10kt

**D. Mission Briefing:** *There are 400 APPs to show LF, but only one for TDR  
 ICU set to only hear FD. Change?*



### Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight ID 2015082612 LPS \_\_\_\_\_

Time	Event	Position	Comments
1726	1P first sonde		
1730	Edge of convection - set 5		
1746	Moved center for fix, turning around		
1750	Center drop turn outbound		
1759	lots of son clutter, raised elevation, still quite a bit but better. 1 on wanted this for situational awareness		
1807	Endpoint turn downwind Sonde		
1850	Endpoint turn inbound Sonde		
1914	Center Sonde		
1919	Minor convection. Set 5		
1937	Endpoint. Turn downwind Sonde		
1949	Some convection Set 5		
	Flying to 1636, since Jimmy F thinks center is up there		
1959	Endpoint, turn inbound. Sonde		
2000	Minor convection Set 5		
2021	Center sonde		
2042	BT/sonde turn downwind		
2117	Endpoint turn inbound Sonde outside turn		
2149	moved center to port sonde		
2211	Endpoint after climbing turn back inbound sonde		
	Much stronger gusty winds at 10000 than 5000		
2236	center, light & variable winds, sonde		
2305	Passed final big cell prepping up start of sandysen sent		