Lead Project Scientist

Date 08/31/19 **Flight ID** 19083112

Storm or Project [redacted] **Experiment name** Dorian (ALOS)

Mission ID

Pre-flight

- [x] 1. Participate in general mission briefing.
- [x] 2. Determine specific mission and flight requirements for assigned aircraft.
- [x] 3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.
- [x] 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.
- [x] 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- [x] 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.
- [x] 7. Report status of aircraft, systems, necessary on-board supplies and crews to Field Program Director.
- [x] 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- [x] 9. Make sure each HRD flight crew member has a life vest.
- [x] 10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

In-Flight

- [x] 1. Confirm from AOC flight director that satellite data link is operative (information).
- [x] 2. Confirm camera mode of operation.
- [x] 3. Confirm data recording rate.
- [x] 4. Complete Lead Project Scientist Form.
- [x] 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

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

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

Lead Project Scientist Check List

Storm or Project Dorian (AOC05) **Experiment name** TDR

Flight ID 190831H2 **Mission ID**

A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist	Hazelton	Flight Director	Parrish
Radar	Rogers	Pilot	Kibbey
Workstation	—	Pilot	Abib/Rossi
Cloud Physics	—	Navigator	Uruto
Dropsonde	Sellwood	Systems Engineer	—
Dropsonde	—	Data Technician	—
AXBT/AXCP	—	Electronics Technicians	—
Observer/Guest	—		
Observer/Guest	—	Flight Engineer	—

B. Take-off and Landing Times and Locations:

Take-Off: ~~2000~~ 2010 UTC Location: Lakeland, FL

Landing: _____ UTC Location: Lakeland, FL

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
31/ 21	26.2	79.4		130 kt
01/ 18	26.6	77.0		130 kt
02/ 18	27.2	75.5		120 kt
03/ 18	28.3	79.1		110 kt
04/ 18	31.0	80.0		95 kt

D. Mission Briefing:

TDR butterfly

8K

New Cat5

Storm or Project [redacted] Dorian **Experiment name** TDR

Flight ID 19AP31HZ **Mission ID**

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

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

REMARKS:

Rebooted HRD LWS for radar

Lead Project Scientist Event

Date 08/31/19 **Flight ID** 190831H2 **LPS** Hazelton

Time	Event	Position	Comments
2110	Takeoff		
2115	Maintenance		
2125	Headed for storm		
2237	End Sonde		
2249	Mid Sonde		
2259	Center	26.18, 74.57	
2301	RMW Sonde		
2302	Nesdis Sonde		
2303	Nesdis Sonde		telentry lost
2313	Mid Sonde		
2325	End Sonde		
2345	End Sonde		
2355	Mid Sonde		
2402	Nesdis Sonde		
2403	Nesdis Sonde		
2409	EYEWALL LIGHTNING		
2404	Eyewall Sonde		
2407	Center	26.2 74.67	
2430	End Sonde		
2456	End Sonde		
2507	Mid Sonde		Bad Sonde
2514	Nesdis Sonde		
2515	Nesdis Sonde		
2517	Center	26.23 74.86	
2519	RMW Sonde		
2520	Nesdis Sonde		
2522	Nesdis Sonde		

Lead Project Scientist Event

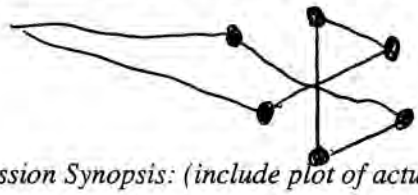
Date 08/31/19 **Flight ID** 190831H2 **LPS** Hazelton

Time	Event	Position	Comments
1528	Mid Sonde		
1539	End Sonde		
1543	Started In		Nesdis Leg
1605	Nesdis Sonde		
1605	Nesdis Sonde		
1606	Nesdis Sonde		
1611	Nesdis Sonde		
1612	Nesdis Sonde		
1613	Nesdis Sonde		
1613	Nesdis Sonde		
1620	End of Sci		

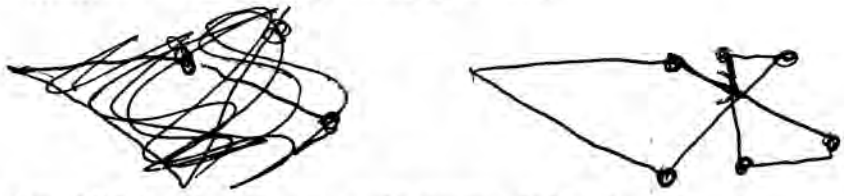
Mission Summary

Scientific Crew (4 RF)
Lead Project Scientist Hazelton
Radar Scientist Rogers
Cloud Physics Scientist —
Dropwindsonde Scientist ~~or~~ Sellwood.
Boundary-Layer Scientist —
Workstation Scientist —
Observers (affiliation)

Mission Briefing: (include sketch of proposed flight track or page #)



Mission Synopsis: (include plot of actual flight track)



Evaluation. (did the experiment meet the proposed objectives?)

Yes. TDR data a got out, and NESDIS got multiple high-wind sondes.

Problems:(list all problems)

Sounding files not getting to Esl folder

Expendables used in mission.

	Deployed	Good	Bad
GPS sondes	31 ~~32~~	~~30~~ 30	1
AXBTs .	—	—	—
Sonobuoys:	—	—	—
UAVs	—	—	—