

Lead Project Scientist

Date 08/30/19
Storm or Project
Mission ID

Flight ID 190830H2
Experiment name EMC TOR

~~Pre-flight~~

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 Field Program Director.
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 Field Program Director
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify Field Program Director 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 Donon (ALOS) Experiment name EMC TOR

Flight ID 9083042 Mission ID _____

29.0-71.0
6
starting
every
1.5
deg
29.0 78.5

A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist	Hartford	Flight Director	
Radar	Rogers	Pilot	Kibbey
Workstation		Pilot	Abitbol/Ross
Cloud Physics		Navigator	Urato
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: 2030 UTC Location: Cubeland

Landing: _____ UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Forecast

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
30/12	25.0	70.7		100 kt
31/18	25.2	72.8		100 kt
01/18	26.8	76.9		120 kt
02/18	27.0	78.8		120 kt
03/18	27.5	80.9		120 kt

D. Mission Briefing:

Storm or Project Dorian (ALCS) Experiment name EMC TOR

Flight ID 190730H2 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	✓	✓	✓	
Doppler Radar/TA	✓	✓	✓	
Cloud Physics				
Data System				
GPS sondes	✓	✓	✓	40
AXBT/AXCP	✓	✓	✓	8
Ozone instrument	✓	✓	✓	
Workstation	✓	✓	✓	
Cameras				

REMARKS:

Lead Project Scientist Event

Date 08/30/19 Flight ID 190830H2 LPS Hazelton

Time	Event	Position	Comments
207300	Takeoff	27.75N, 81.65W	
209132	TDK on	↓	
223516	Sonde ✓	26.03N, 72.32W	
223516	IP		
2242	Band on map	25.78N, 72.91W	Strong Band
224630	Sonde ✓		
224922	Eye on radar		C18
225500	Concentric Bands		
225700	Sonde ✓		
2257	Center sonde ✓	25.22N 70.8W	
2300	RMW sonde ✓	25.22N 70.8W	
2302	Sonde ✓		
2304	Mid sonde ✓		
2316	Sonde ✓		
2320	End of horizon		
2340	Sonde ✓		
23440	Inbound		
234800	Mini sonde ✓		Wadler module
234842	Mini sonde ✓		↓
234936	Mini sonde ✓		↓
235249	Mid sonde ✓		↓
235923	RMW sonde ✓		↓
240039	RMW sonde ✓		↓
240119	RMW sonde ✓		↓
240230	Center	25.33 71.8W	
240338	RMW sonde ✓		Wadler
240450	RMW sonde ✓		↓
240615	RMW sonde ✓		↓

WSD kt

Lead Project Scientist Event

Date 08/30/19

Flight ID 190830142 LPS Hazelton

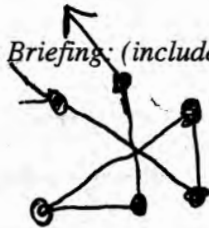
Time	Event	Position	Comments
241507	Mini Sonde ✓		Weller
241549	mini Sonde ✓		↓
241652	Mini Sonde ✓		
241852	Midpoint Sonde ✓		
242822	End Sonde ✓		
242522	Start Downwind		
244423	Sonde / AXBT End ✓		
24423	Start Inband ✓		
245507	Mid Sonde ✓		
250310	Sonde (NESDTS) ✓		
250748	RMLW Sonde ✓		
250621	Sonde / BT Combo	25.38 71.18	
250749	RMLW Sonde ✓		
250909	NESDTS sonde ✓		
251930	Mid Sonde ✓		
252935	End Sonde / BT ✓		
252935	Climb to 25kft		
2555	High Alt Sonde		MHC
2608	High Alt Sonde		↓
2621	High Alt Sonde		
2632	High Alt Sonde		
2646	High Alt Sonde		
2659	High Alt Sonde		↓

Mission Summary

Scientific Crew (4 RF)

Lead Project Scientist *Hickman*
 Radar Scientist *Rogers*
 Cloud Physics Scientist *—*
 Dropwindsonde Scientist *Sellwood*
 Boundary-Layer Scientist *—*
 Workstation Scientist *—*
 Observers (affiliation) *Congressional Staffers*

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



Mission Synopsis: (include plot of actual flight track)

High Alt Drops



Strengthening MH
Strong winds
Sonde

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

We got good data completed pattern for Josh / weather and completed first and high altitude drops for MH

Problems: (list all problems)

None

Expendables used in mission:

	Deployed	Good	Bad
GPS sondes:	38	38	0
AXBTs:	3	2	2
Sonobuoys:	—	—	—
UAVs	—	—	—