Lead Project Scientist

Date 8/12/21 **Flight ID** 20200812H2

Storm or Project Mission ID 0706A ALOG / FRED **Experiment name** EMC TASK

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 ALOG/FRED **Experiment name** EHC TASK

Flight ID 20210812H2 **~~Mission ID~~** 0706A

A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist		Flight Director	
Radar		Pilot	
Workstation		Pilot	
Cloud Physics		Navigator	
Dropsonde		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: 2003 UTC Location: LAKELAND 5.3 FLIGHT TIME

Landing: 0118 UTC Location: LAKELAND

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
/				
/				
/				
/				
/				

D. Mission Briefing:

Storm or Project_____ Experiment name

Flight ID 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				
AXBT/AXCP				
Ozone instrument				
Workstation				
Cameras				

REMARKS:

21 12 75 04

Lead Project Scientist Event

Date 8/12/21 Flight ID 20210812H2 LPS ZAWISLAK/ROGERS

		Time	Event	Position	Comments
		2003 Z	TAKEOFF		
PT1	SONDE #1	2129Z	AT PT1 CH1	22°32' / 77°34'	
MP	SONDE #2	2140Z	AT MID PT1 → CTR CIR	22°6' / 76°44'	
			A CONVECTIVE BURST HAS BEEN DEVELOPING	OFFSHORE OF	
			CUBA'S FAR EASTERN TIP, AND OUR OUTBOUND LEG STUNT RIGHT		
			IN THE MIDDLE OF IT, SO WE'LL EXTEND OUR	SONDE TO THE SE	
			TO ENSURE WE GET THE OUTFLOW. THAT'S WHERE THE CENTER		
			MAY BE → SO THE CTR SONDE ISN'T RIGHT THE CENTER, BUT		
			THE MIDPOINT OUTBOUND MAY BE.		
"CTR"	SONDE #3	2152Z	CTR SONDE CH3	21°41' / 75°58'	→
MP SE	SONDE #4	2205Z	MP SONDE OUT CH4	21°12' / 75°04'	
EPSR	SONDE #5	2219Z	EP SONDE OUT CH5	20°42' / 74°15'	
		2225Z	TURNING DOWNWIND.		
			PAINTING THE PRECIPITACY THAT WE WENT THROUGH - DEFINITELY		
			A MID-LEVEL CENTER		
			AND THE SURFACE CIRCULATION MAY BE THERE		
EP NE	SONDE #6	2259Z			
EP NE	SONDE #7	2300Z	BACK AT NE EP	22°51' / 73°38'	
MP NE	SONDE #8	2313Z	MP NE CH8	22°8' / 74°24'	
CTR SONDE	SONDE #9	2327Z	CTR OF MP CH9	21°7' / 75°6'	
MP NW	SONDE #10	2340Z	MP OUT NW	21°52' / 75°43'	
			SO GOT 2 GOOD LOOKS AT THE PRECIP THAT		
			WAS WERE WORKING A MID-LEVEL CENTER		
			THE LLC IS STILL WEST OF CTR, BUT NOT TOO FAR		
			OFF TO THE EAST OF US. SO MORE CONVECTION NEAR THE		
			SURFACE CENTER.		
EP NW	SONDE #11	2353	EP NW END OF NW OUTBOUND		22°32' / 76°18'
			CH 3		

SOME RESULT CREDIT LOOKS FROM THE TDR TODAY.

0118 Z LANDING