

## Lead Project Scientist

Date 8/11/21

Flight ID 20210811 H1

Storm or Project

Experiment name ENC TASK

Mission ID ALOG/FRED  
0406A

### 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 EMC

Flight ID 20210811H2 Mission ID 0406A

**A. Participants:**

Function	Participant	Function	Participant
Lead Project Scientist		Flight Director	<u>CARPENTER</u>
Radar	<u>ZAWISLAK / ROGERS</u>	Pilot	<u>MITCHELL / ROWENBZLE / COPARE</u>
Workstation	<u>ZAWISLAK / ALVEN / GAMACHE</u>	Pilot	
Cloud Physics		Navigator	<u>URATO</u>
Dropsonde	<u>SELLWOOD</u>	Systems Engineer	
Dropsonde		Data Technician	<u>MASCARO</u>
AXBT/AXCP		Electronics Technicians	<u>AVM: UNDERWOOD</u>
Observer/Guest		Flight Engineer	<u>DARBY / WYSINGER</u>
Observer/Guest			

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

Take-Off: 1946 UTC Location: LAKELAND 7.5 FLIGHT TIME

Landing: 0314 UTC Location: LAKELAND

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

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

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

**D. Mission Briefing:**

EMC TASKING MISSION, WHICH IS ESSENTIALLY SERVING AS A SYNOPSIS SURVEILLANCE FLIGHT TO SAMPLE SHEAR AND DRIFTS FROM HISPANIA AND FRED. FRED IS DOWN TO A TO AND IS OVERLAP, BUT A CIRCUMNAVIGATION AROUND HISPANIA WILL CAPTURE THE FLOW AROUND IT. DROP AS HIGH AS POSSIBLE.

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:

### Lead Project Scientist Event

Date 8/11/21

Flight ID 20210811 HQ LPS ZAWISUK/RUGERS

Time	Event	Position	Comments
1946Z	TAKE OFF FROM LAKELAND		
2106Z	23°54' / 76°52'		
2108Z	BACKUP TO WP1		CLEAR BELOW, SCATTERED CLOUDS
	SO WE HAD ISSUES W/ RSYNC, BUT MIKE RESOLVED THOSE. ALSO XCAUT WAS GOING IN AND OUT BUT THAT WAS BECAUSE THE OTHER COMPUTER WAS OFF AND THEN SHINE IS ADDRESSING.		
	SO WE'RE ALL UP AND RUNNING FOR THE NEW AND AVIARS ARE ALSO RUNNING AND CRL IS ON.		
2120	AT PT 2, BUT NO LAUNCH DATA		
2120	AT PT 2, LOOKING BETTER		
2133Z	AT PT 3, CH 5		
2143Z	AT PT 4, CH 6	21°20' / 73°55'	
2201Z	AT PT 5, CH 7	21°13' / 72°51'	
2211Z	AT PT 6, CH 8	20°59' / 71°59'	
	CONVECTION OVER LAND, NEAR THE CENTER IS STILL RISING THE ORIGINAL ANVIL CLOUD ON PERIM NEAR THE OLD MLC IS NOW <u>6</u> MOSTLY DISSIPATED.		
	SO THE CENTER IS LIKELY OVER LAND, BUT IT'S NOT MOVING MUCH NORTHWARD. IS THE TERRAIN INFLUENCE IT CAN'T GO OVER THE MOUNTAIN BUT CAN DRAGGET TO THE WEST ALONG THE SOUTH SLOPE		
2222Z	PT 7, CH 1	20°44' / 70°57'	
2229Z	SOME BROKEN CLOUDS 1 MODERATE DEEP CONVECTION NOTHING TOO EXCITING FOR THE TOR		
	WE'VE BEEN FLYING AT 21 KIL		

SOUND 1

SOUND 2

WP 2 SOUND 13

WP 2 SOUND 14

WP 3 SOUND 15

WP 4 SOUND 16

WP 5 SOUND 17

WP 6 SOUND 18

PT 7 SOUND 19



### Lead Project Scientist Event

Date 8/11/21

Flight ID 20210911 H1 LPS Zawisak / ROGERS

	Time	Event	Position	Comments
PT 8 SOUNDR #10	2233	AT WP 8, CH 2	20°28' / 69°57'	
PT 9 SOUNDR #11	2247	AT WP 9, CH 3	79°43' / 69°57'	
				STARTING TO SHIP INTO THE STRONG DECK
				START FOR ANALYSIS 2245Z
PT 10 SOUNDR #12	2302	AT PT 10, CH 4	18°59' / 67°60'	
				IN THE SOUND NOW. LOSS OF STRONG DECK
PT 11 SOUNDR #13	2318Z	AT PT 11, CH 5	17°33' / 67°60'	
				MADE THE TURN TO THE WEST FOR THE COAST TO WEST
				LEG SOUTH OF HISPANIOLA
	2332	NOW HEARD DOWN TO 10KFL		
				NOW STRONG CONVECTION ON THE RADAR
PT 12 SOUNDR #14	2341Z	PT 12, CH 6	17°25' / 70°1'	
PT 13 SOUNDR #15	0008Z	PT 13, CH 7	17°25' / 72°2'	
	0014Z	CLIMBING BACK UP TO 22KFL WITH THE WIND CLEAR		
				FROM THE ICE ABOVE.
				8 PM NMC ADVISORY KNOWN TO DOWN TO 22 TO
PT 14 SOUNDR #16	0032	PT 14, CH 8		NOW IN THE CLEAR AREA SW OF HAITI'S
				FOR SOUTHWESTERN COAST
	0040	CLIMBING UP TO 26KFL.		
PT 15 SOUNDR #17	0041	PT 15, CH 1		
PT 16 SOUNDR #18	0053	PT 16, CH 2	19°03'N / 74°55'	
PT 17 SOUNDR #19	0107	PT 17, CH 3	EARLY DRUP 19°53' / 73°45'	
PT 18 SOUNDR #20	0125	PT 18, CH 4	CAA SINCE WE DID A	ORIENTATION FOR A COUPLE
				CONVECTION CELL
PT 19 SOUNDR #21	0141	PT 19, CH 5		NOW IN CLEAR AREA AFTER A COUPLE
				CONVECTION CELL
PT 20 SOUNDR #22	0157	PT 20, CH 6	23°1' / 77°1'	LAST SOUND

22 out / 20 Good / 20 transmitted



# Observer's Flight Track Worksheet

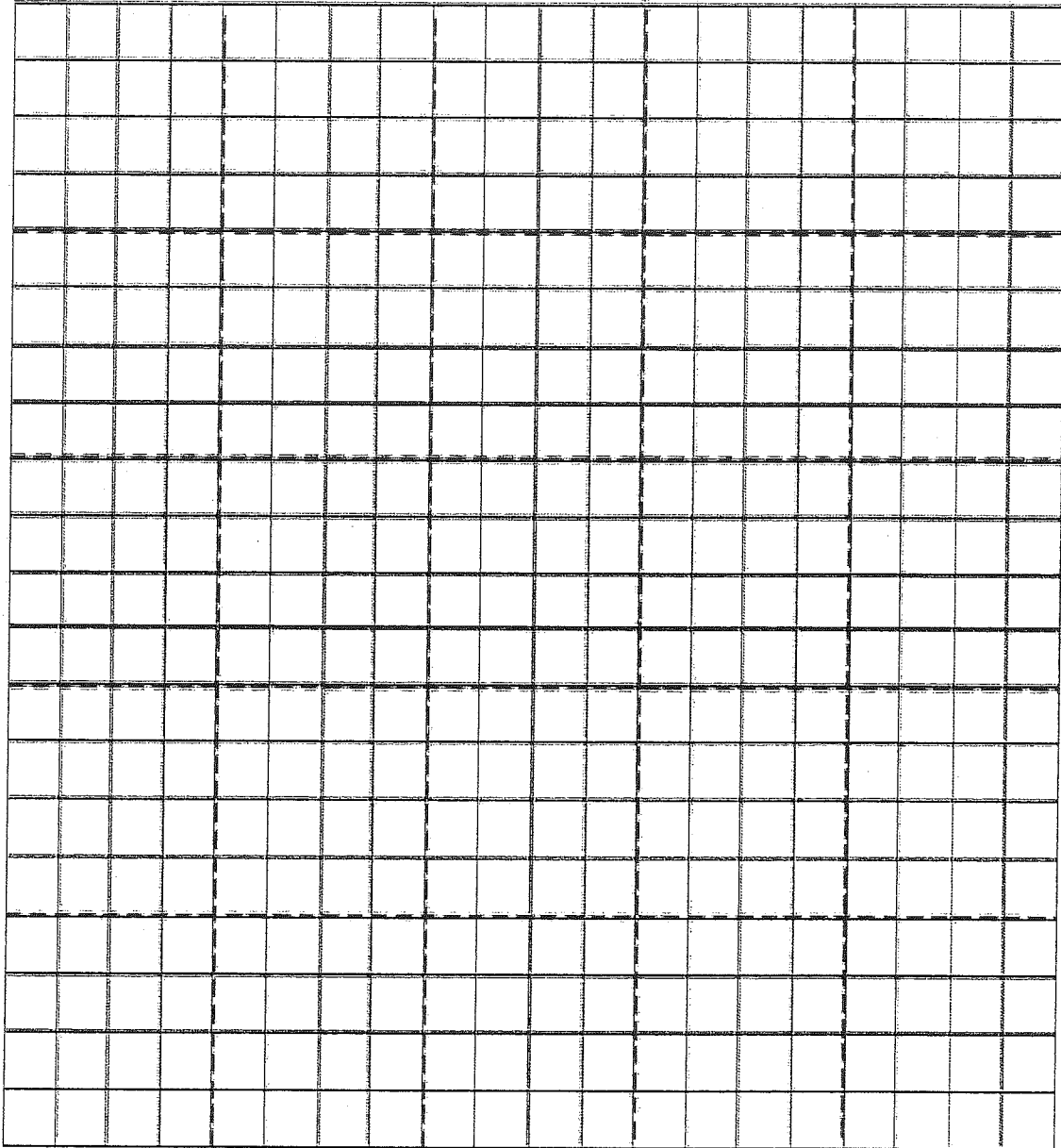
Date \_\_\_\_\_

Flight \_\_\_\_\_

Observer \_\_\_\_\_

*Use highlighter to draw freehand on chart*

Latitude (°)



Longitude (°)

## Mission Summary

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Scientific Crew ( 4 RF )  
Lead Project Scientist  
Radar Scientist  
Cloud Physics Scientist  
Dropwindsonde Scientist  
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?)*

*Problems:(list all problems)*

*Expendables used in mission:*

	Deployed	Good	Bad
GPS sondes :			
AXBTs :			
Sonobuoys:			
UAVs			