

Lead Project Scientist

Date 8/28/21
Storm or Project Ida
Mission ID

Flight ID 2021082841
Experiment name TDR

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

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A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist	Rogers	Flight Director	
Radar		Pilot	
Workstation		Pilot	
Cloud Physics		Navigator	
Dropsonde	J. Zhang	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: _____ UTC Location: _____

Landing: _____ UTC Location: _____

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:

Lead Project Scientist Event

Date

Flight ID

LPS

Time	Event	Position	Comments
1955	takeoff	KLAL	
2045	drop 1, BT 1	at P, 105m	low center 29.8C
2057	drop 2, BT 2	NE mid	29.5
2105	drop 3	1st rapid fire	NE
2106	drop 4, BT 3	2nd rapid fire	NE, no BT
2107	drop 5	3rd rapid fire	NE
2113	center, drop 6		
2118	drop 7	1st rapid	SW
2119	drop 8, BT 4	2nd rapid	SW 29.7
2120	drop 9	3rd rapid	SW
2127	drop 10, BT 5	SW mid	29.5
2140	drop 11	SW end	
2210	drop 12	S end	beam in bowl leg
2219	drop 13, BT 6	S mid	29.3
2229	drop 14, BT 7	S RW	29.6
2233	drop 15	center	970.8 145/14
2236	drop 16, BT 8	N RW	29.8
2247	drop 17, BT 9	N mid	29.9
2259	drop 18, BT 10	N end	30.3
2315	pattern	downwind leg	start strat spiral,
		on that side	in a region downwind
			of where we saw secondary wind
			max visibility starting to form on
		NE inbound leg	
2328	pattern, drop 19	top of spiral, drop smoke	-9.5C
	drop 20 (backup)	backup circle	
2353	drop 21, BT 11	NW downwind	29.9
		mid	

Lead Project Scientist Event

Date _____

Flight ID

LPS

[illegible]

Lead Project Scientist Event

Date _____

Flight ID

LPS

[illegible]

Observer's Flight Track Worksheet

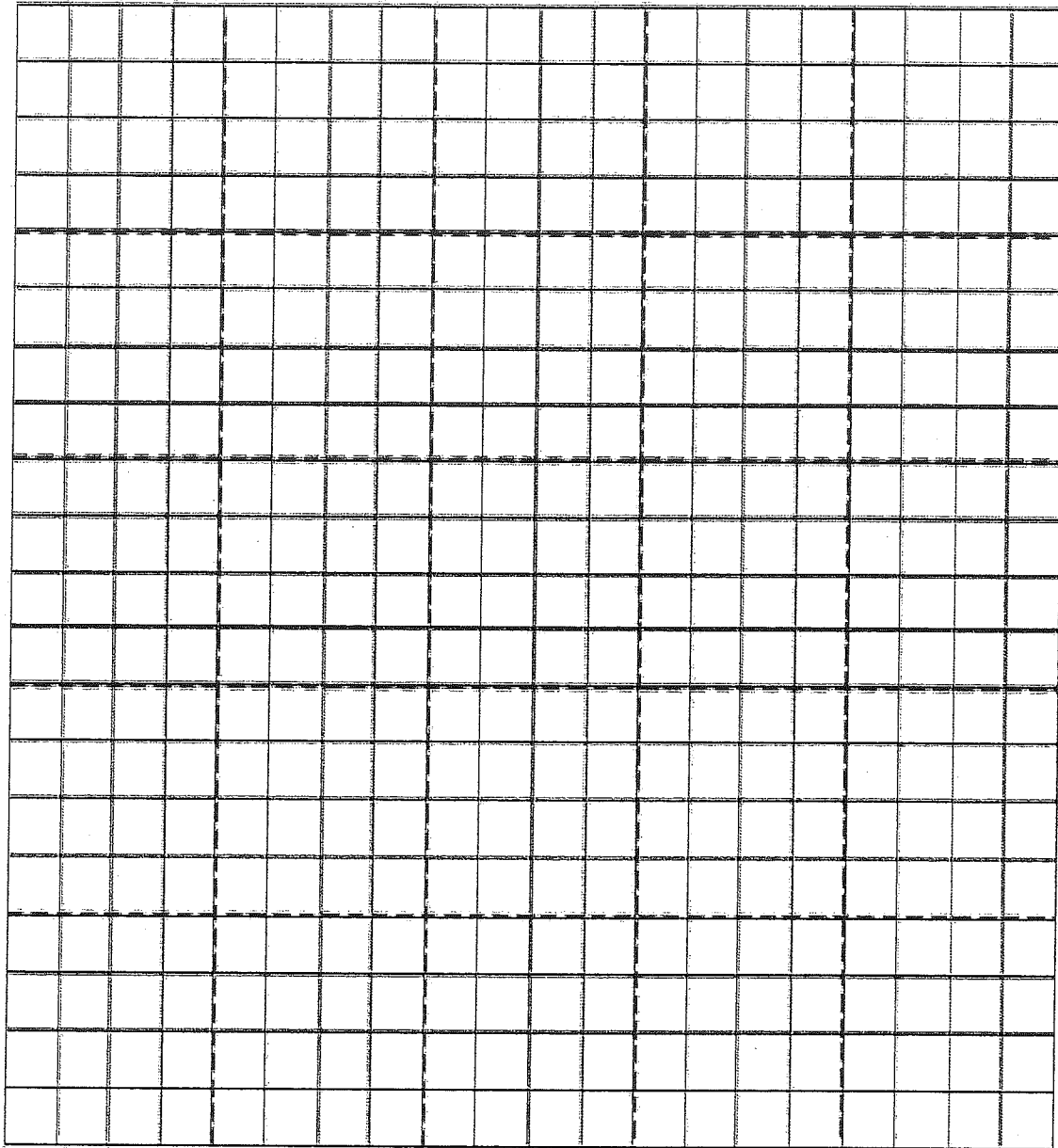
Date _____

Flight _____

Observer _____

Use highlighter to draw freehand on chart

Latitude (°)



Longitude (°)

Mission Summary

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			