

Lead Project Scientist

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

Flight ID 2021082841
Experiment name 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 10-3 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 _____

Experiment name _____

Flight ID _____

Mission ID _____

A. Participants:

Function	Participant	Function	Participant
Lead Project Scientist	<i>Cozys</i>	Flight Director	
Radar		Pilot	
Workstation		Pilot	
Cloud Physics		Navigator	
Dropsonde	<i>J. Zhang</i>	Systems Engineer	
Dropsonde		Data Technician	
AXBT/AXCP		Electronics Technicians	
Observer/Guest		Flight Engineer	
Observer/Guest			

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 10, 105km	from center 29.8C
2057	drop 2, BT 2	NE mid	29.5
2105	drop 3	1st radar fire	NE
2106	drop 4, BT 3	2nd radar fire	NE mid BT
2107	drop 5	3rd radar fire	NE
2113	center drop 6		
2118	drop 7	1st radar	SW
2119	drop 8, BT 4	2nd radar	SW 29.7
2120	drop 9	3rd radar	SW
2127	drop 10, BT 5	SW mid	29.5
2140	drop 11	SW end	
2210	drop 12	S end	beam in low lga
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	downward leg on NW side	start strat. spiral, in a region downward of where we saw some max. possibly starting to form on 152
		NE inward lga	
2328	pattern, drop 19	top of spiral	drop 20 (back up) backup spiral; -9.5C
	drop 20 (back up)	backup spiral	
2353	drop 21, BT 11	NW downward mid	29.9

Observer's Flight Track Worksheet

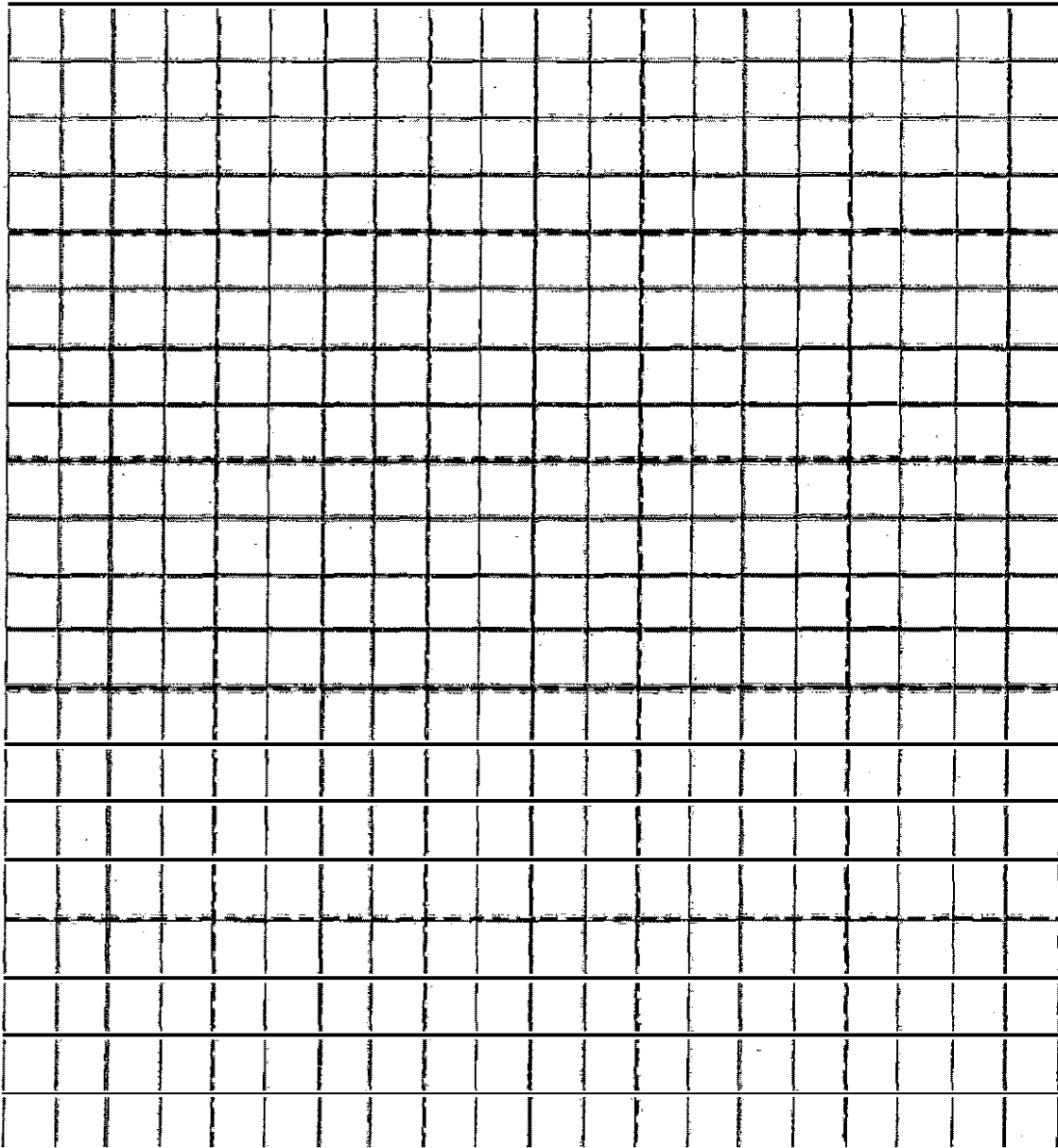
Date

Flight

Observer

Use highlighter to draw freehand on chart

Latitude ($^{\circ}$)



Longitude ($^{\circ}$)

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			