

## Lead Project Scientist

Storm or Project \_\_\_\_\_ Experiment name \_\_\_\_\_  
Flight ID \_\_\_\_\_ Mission ID \_\_\_\_\_

### Preflight

- \_\_\_\_\_ 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 MGOC in Miami.
- \_\_\_\_\_ 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 MGOC.
- \_\_\_\_\_ 7. Determine next mission status, if any, and brief crews as necessary.
- \_\_\_\_\_ 8. Notify MGOC 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 Arthur Experiment name TDR

Flight ID 20140702J1 Mission ID 0801A ARTHUR

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Agarson</u>	Flight Director	<u>Holmes / Sears</u>
Radar/Workstation	<u>J. Zhang</u>	Pilots	<u>Halverson / Didier / Marten</u>
		Navigator	<u>Sloan</u>
Cloud Physics		Systems Engineer	<u>Norher</u>
		Data Technician	<u>Warnecke / Lynch</u>
Dropwindsonde	<u>Settward</u>	Electronics Technician	
AXBT/AXCP		Other <u>Diagrams Hystek</u>	
Photographer/Observer	<u>Joseph Patton</u>	Flight Engineer	<u>Heystek</u>
s/Guests	<u>Holly Naez</u>		

Hergen + (AOC interns)

LaFonde

B. Take-off and Landing Times and Locations:

Take-Off: 18025 UTC Location: MacDill

Landing: \_\_\_\_\_ UTC Location: MacDill

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

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>02/18/00</u>	<u>29 25</u>	<u>79 09</u>	<u>996</u>	<u>51kt sfc / 63kt FL</u>
<u>02/19/027</u>	<u>29 30</u>	<u>79 07</u>	<u>995</u>	<u>41kt sfc / 59kt FL</u>

D. Mission Briefing: TDR Figure 4 -> circled area -> Fig. 4 rotated



# Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight ID \_\_\_\_\_ LPS \_\_\_\_\_

Time	Event	Position	Comments
	Big convection	NE side (best?)	
		29 30 79 07	41 20mm 1910 19.8mm NW
	20mm RHW both sides		
	doing circumnavigation @ 35mm		
		29 42 79 10	67kt 18mm 2003
		29 44 79 06	46kt 14mm 202908
2112	cell almost due N 2mm	35+ 26Z	
2145	inbound turn		
2201	center		
		29 58 79 11	67kt 18mm 214500 991
		29 57 79 06	56kt 18mm 220151 991
2305	turn inbound	005/09	
2328	center		
2350	end on bound		
			54kt 10mm 231140 990
		30 04 79 06	56kt 12mm 232840 990-
002050	center	30 14 79 08	60kt 17mm 002130 988
0045	last drop - direct Macell		
0130	landed		

circle → comma  
→ circle

missed RHW,  
E because AVARS did  
not have side ready  
we because turning &  
could not see RHW