

Lead Project Scientist

Flight ID

120827H2

Storm

ISAAC

LPS

JASON DUNION

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.
- 5. 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.
- 6. Report status of aircraft, systems, necessary on-board supplies and crews to HFP Director.
- 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- 7. Make sure each HRD flight crew member has a life vest.
- 7. 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.
- 2. Confirm camera mode of operation.
- 3. Confirm radar recording set-up.
- 4. Confirm data recording rate.
- 5. Complete Lead Project Scientist Form.
- 6. 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 bag separately from other missions. Turn in to data manager at HRD.
- 5. Copy serial flight data, dropsonde files, and radar data onto thumb drive. Turn in with completed forms.
- 6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to HFP Director.
- 7. Determine next mission status, if any, and brief crews as necessary.
- 8. Notify HFP 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 ISAAC Experiment name TDR
 Date 27 Aug 2012 Aircraft N42 Flight ID 120827H2
 Mission ID 2809A

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>DUNN</u>	Flight Director	
Radar	<u>Reasor</u>	Pilots	
Dropwindsonde	<u>Bucci</u>	Navigator	
Sea-Air		Systems Engineer	
Photographer/Observer/ Guests (give affiliation)		Data Technician	
Cloud Physics		Electronics Technician	
		Other ()	

B. Take-off and Landing Times and Locations:

Take-Off: 1955 UTC Location: JAX

Landing: 0333 UTC Location: JAX

Number of Eye Penetrations: 5 ("centers")

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

E. — Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	Number of Expendables
Radar/LF	✓ ↑			
Doppler Radar/TA	↑			
Cloud Physics				
Data System	↑			
GPS sondes	↑			
AXBT/AXCP	↑			
Ozone instrument				
Cameras				
Other ()				

D. Mission Briefing:

- IP Chr: did a triple RMW set for uhlhorn + Zhang
 = End pt 6 (~2315-2330) → ~50 nm wide OT... rough w/ lots of rain

PT	Time	Coord	Storm motion	Press.
IP (1)	21006	27.78 85.00	300 14	
C	212543	26.45 86.19		984.4 mb sonde
3	2152	25.14' 87° 28'		
4	2219	25.23' 85° 4'		
C	2244	26° 35' 86.22'		951 extrap
5	2308	27.47' 87.44'	310 10	
6	2324	26.42' 88.31'		
Chr	2354	26.47' 40" 86.27' 25"		9 0142Z Chr 0211Z 27.58' 86.59'
7	0019	26.47' 84° 32'		11
8	0053			
Chr	0116Z	26.58' 86.38'		

