Lead Project Scientist

Flight ID 0809101 **Storm** IKE **LPS** DUNION

Preflight

____ 1. Participate in general mission briefing.

____ 2. Determine specific mission and flight requirements for assigned aircraft.

____ 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.

____ 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 appropriate HRD operations center (MGOC in Miami).

____ 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 members have life vests

____ 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

____ 8. Collect "mess" fee ($2.00) from all on-board HRD flight crew members.

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. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to MGOC.

____ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

____ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.

____ 5. Obtain a copy of the radar DAT tapes. Turn in with completed forms.

____ 6. Obtain a copy of the all VHS videos form aircraft cameras (3-4 approx.). Turn in with completed forms.

____ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.

____ 8. Determine next mission status, if any, and brief crews as necessary.

____ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.

____ 10. Prepare written mission summary using **Mission Summary** form (due to Field Program Director a week after the flight).

Lead Project Scientist Check List

Storm or Project IKE **Experiment name** TDR
Date 10 Sep 2008 **Aircraft** 43 RF **Flight ID** 0809101
1909A IKE

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Dunion	Flight Director	Mayeaux
Radar	M. Black	Pilots	Choy/Ebhardt/
Workstation	Dorst	Navigator	Kidder
Cloud Physics		Systems Engineer	Floyd
Photographer/Observer /Guests		Data Technician	Lynch
Dropwindsonde	M. Black/ Dorst	Electronics Technician	Smith
AXBT/AXCP		Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0808 UTC Location: MacDill

Landing: 1525 UTC Location: MacDill

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
adv 10 Sep 3Z	23.2	84.3 W		70kt
Frest 10 Sep 12Z	23.9N	85.5 W		
0708z	23.27' (23.45)	84 40' (84.67)		
09z adv.	23.5N	84.9W		
1258z vort	23'43"N	85' 18" W		

D. Mission Briefing:

Lead Project Scientist Event Log

Date 9-10-08 **Flight** 080910i **LPS** Dunion

Time	Event	Position	Comments
0915Z	initial NW-SE run	25°6.5'N 86° 11.4''	outer eyewall 75nm SE
			inner pinhole eye ~115nm SE
0934Z	outer eyewall		~60kt SFC
1900Z	cut SE short at end of NE-SE leg		
1100Z	E-W leg	W of Ctr	Ctr near edge of western convection (shear/restricted outflow SW + W of Ctr)
	W turnpoint		NWS drop
	SW turnpoint		NWS drop
1145Z	SW-NE inbound		eyewall open (W semicirle)
1255Z	N-S inbound		eyewall open (SW to N)
1357	Ctr		eyewall shrinking even more; open W, NW, N, NE

Lead Project Scientist Event Log

20 BTS

Date _____ **Flight** _____ **LPS** _____

HRD drops: 10, NWS: 6

Time	Event	Position	Comments
	Drop 1 / AXBT	NW	NWS sonde (no scatterers)
	AXBT		—
	Drop 2 / AXBT	NW	(HRD) sonde
	AXBT		
	ctr drop (drop 3)	ctr	961.4 sfc press NWS
	axbt	SE	
	drop 4 / AXBT	E	(HRD) drop
	AXBT	E	bad AXBT
	drop 5 / AXBT	E	(HRD) drop (Bad AXBT)
	ctr pass (no drop)		958.3 Extrap.
	drop 6 / AXBT	W	(HRD)
	AXBT / Drop #7	SW	NWS
	drop 8 / AXBT	SW	(HRD) 956.9
	drop 9	Ctr	(HRD) 956.9 0.4 m/s
	AXBT	NE	
	drop 10 / AXBT	NE	(HRD)
	drop 11 / AXBT	NE corner	(HRD)
	drop 12 / AXBT	N corner	NWS
	AXBT	N	
	drop 13 / AXBT	N	(HRD)
	AXBT		
	drop 14 / AXBT	S	(HRD)
	drop 15	ctr (northbound)	NWS
	drop 16	N (FP)	NWS