Flight ID 20120828H1 **Lead Project Scientist** **Storm** Isaac **LPS** Marks

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 HFP **Experiment name** HFP/Isaac
Date 8/28/2012 **Aircraft** 42RF **Flight ID** 20120828H1
Mission ID 3009

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Marks/Jaimes	Flight Director	Sears
Radar	Sellwood	Pilots	Nelson/Keeas/Sweeney
Dropwindsonde	11	Navigator	Sloan
Sea-Air	UM/RSMAS J.Brewster	Systems Engineer	Heyskk/Darby
Photographer/Observer/ Guests (give affiliation)	R. Schuster	Data Technician	Bosko/Olney
Cloud Physics		Electronics Technician	Colynch/Quiles
		Other ( )	

B. Take-off and Landing Times and Locations:

Take-Off: 0746 UTC Location: JAX
Landing: 1604 UTC Location: JAX
Number of Eye Penetrations: 5 (TS)

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:

TDR pattern
rotating Fig. 4 (see pattern) at 8kft
centers from E, in-storm upper ocean
sampling with combo-drops plus
AXBT, CP, CTD's with UM/RSMAS crew
(see attached sheet of planned drop locations)

Mission Summary
Storm name
YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)
Lead Project Scientist Marks
Radar Scientist Schwood
Dropwindsonde Scientist M Black-Harvie
Sea-Air Scientist James/Brewster/
Cloud Physics Scientist _____
Observers _____
_____
_____

Mission Briefing: (include sketch of proposed flight track or page #)

see attached form

Mission Synopsis: (include plot of actual flight track)

see log

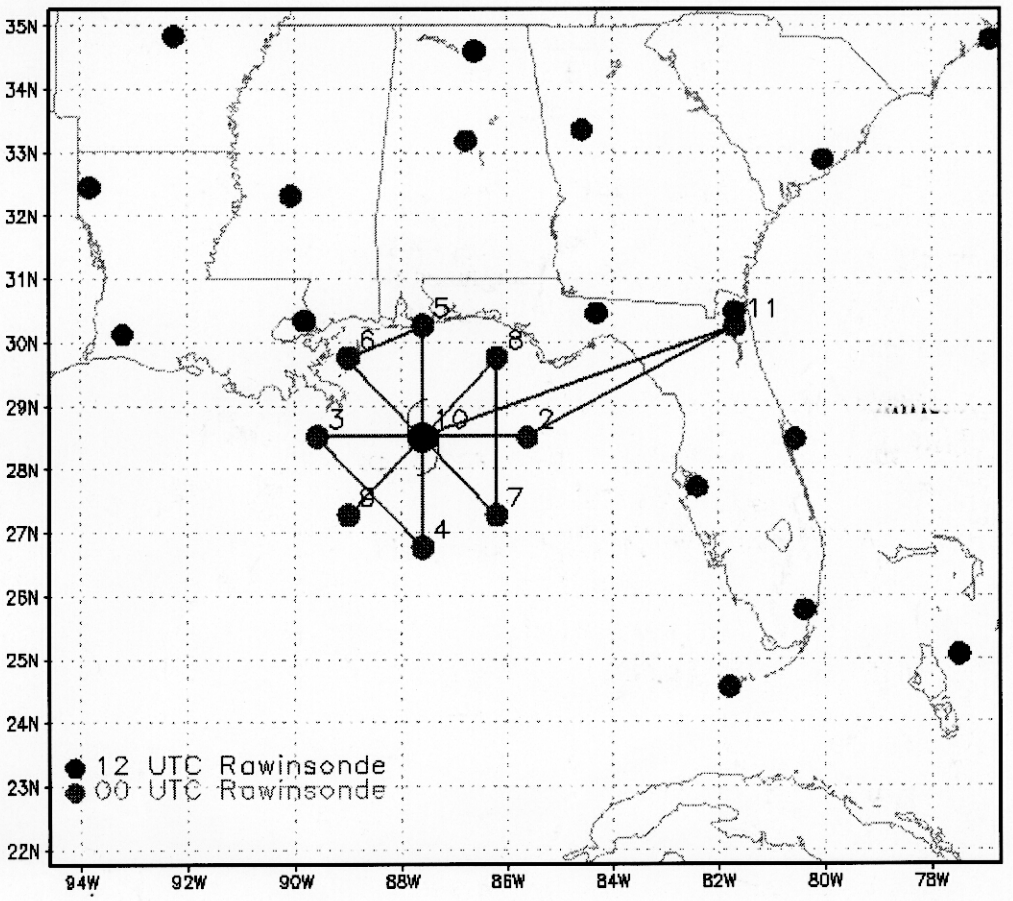
Evaluation: (did the experiment meet the proposed objectives?)

Great mission (see blog Twitter)

Problems:(list all problems)

glitches with radar

Expendables used in mission:
GPS sondes : 33
AXBTs : 28
Sonobuoys: _____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MISSION PLAN: ISAAC

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N42RF Proposed takeoff: 28/0800Z

TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	JACKSONVILLE			0.	0.	0:01
1S	28 30	85 37	105/090	231.	231.	1:02
2S	28 30	89 35	105/270	210.	441.	1:57
3S	26 45	87 36	105/180	149.	590.	2:37
4S	30 15	87 36	105/000	210.	800.	3:32
5S	29 44	89 00	105/315	79.	879.	3:53
6S	27 16	86 12	105/135	210.	1089.	4:49
7S	29 44	86 12	105/045	149.	1238.	5:28
8S	27 16	89 00	105/225	210.	1448.	6:23
9S	28 30	87 36	0/000	105.	1553.	6:52
10	JACKSONVILLE			327.	1880.	7:58