

Flight ID 20120827#1 **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 Isaac Experiment name Isaac
 Date 8/27/2012 Aircraft 42RF Flight ID 20120827H1
 Mission ID 2609A

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Markus Sellwood</u>	Flight Director	<u>Sears</u>
Radar		Pilots	<u>Nelson/Sweeney/Kerr</u>
Dropwindsonde		Navigator	<u>Sloan</u>
Sea-Air		Systems Engineer	<u>Hegstake</u>
			<u>Bosko</u>
Photographer/Observer/ Guests (give affiliation)		Data Technician	
			<u>C. Lynch</u>
Cloud Physics		Electronics Technician	
		Other ()	

B. Take-off and Landing Times and Locations:

Take-Off: 0951 UTC Location: JAX
 Landing: 1540 UTC Location: JAX

Number of Eye Penetrations: 5 *no eye not hurricane*

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:

rotating Fig 4, 105 nm legs, drops
 end, mid, & RMW, of 1st & last
 (see attached sheet)

see my log for notes

Mission Summary

Storm name

YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)

Lead Project Scientist Markus J

Radar Scientist Sellwood

Dropwindsonde Scientist "

Sea-Air Scientist "

Cloud Physics Scientist "

Observers Rds Howard (FSU)

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?)

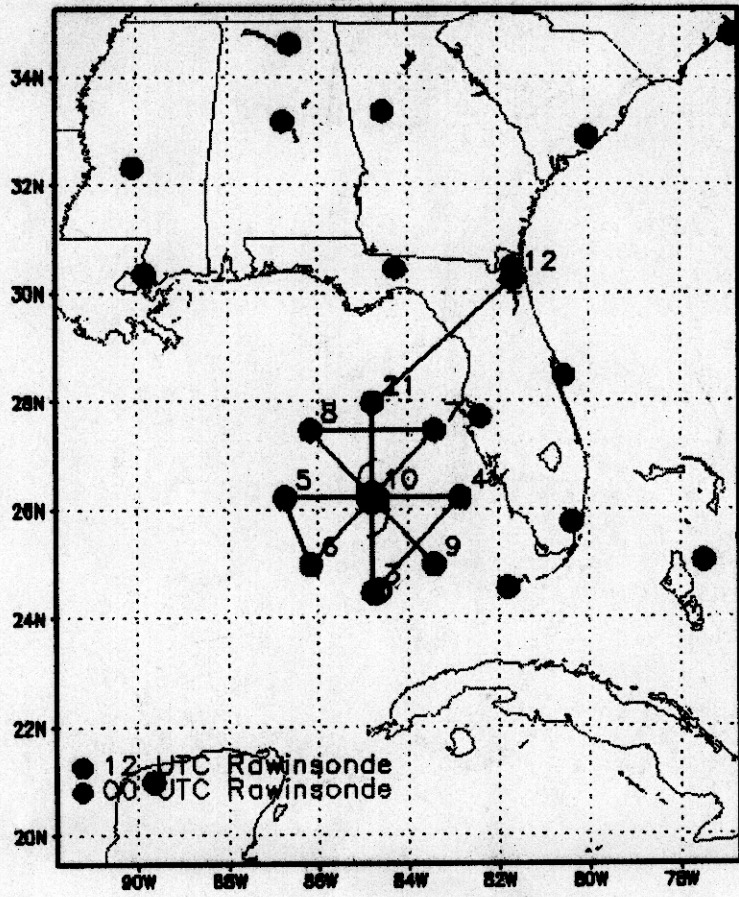
Problems:(list all problems)

Expendables used in mission:

GPS sondes : _____

AXBTs : _____

Sonobuoys: _____



MISSION PLAN: ISAAC

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N42RF Proposed takeoff: 27/0800Z

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	27 57	84 48	105/000	214.	214.	0:57
2S	24 27	84 48	105/180	210.	424.	1:53
3S	26 12	82 51	105/090	149.	573.	2:32
4S	26 12	86 45	105/270	210.	783.	3:27
5S	24 58	86 10	105/225	80.	863.	3:49
6S	27 26	83 25	105/045	210.	1073.	4:45
7S	27 26	86 11	105/315	147.	1220.	5:24
8S	24 58	83 26	105/135	210.	1430.	6:19
9S	26 12	84 48	0/000	105.	1535.	6:47
10S	27 57	84 48	105/000	105.	1640.	7:15
11	JACKSONVILLE			214.	1854.	7:59