Lead Project Scientist

Storm or Project Hurricane Matthew **Experiment type**_____
Flight ID 20161005I2 **Mission ID**_____

Preflight

____ 1. Participate in general mission briefing.

____ 2. Determine specific mission and flight requirements for assigned aircraft from the Field Program Director.

____ 3. 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.

____ 4. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.

____ 5. Determine from AOC flight director the mission designation and whether aircraft has operational fix responsibility.

____ 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 Field Program Director.

____ 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drops.

____ 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. Request AOC flight director to leave radar in non-sector mode for initial Figure 4.

____ 5. Once at IP, request AOC flight director adjust radar tilt to minimize sea clutter.

____ 6. Complete Lead Project Scientist Form.

____ 7. Check in occasionaly 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 Dropsonde raw and processed files from the AVAPS operator on thumb drive.

____ 4. Obtain a copy of the radar LF files from the radar technician on thumb drive.

____ 5. Obtain a copy of the tar'ed radar TA files from the radar scientist on thumb drive.

____ 6. Obtain a copy of serial flight data and raw NetCDF file on thumb drive from the data technician.

____ 7. Obtain a copy of SFMR data on thumb drive from the data technician.

____ 8. Obtain a copy of DMT data on thumb drive from the data technician.

____ 9. Report landing time, aircraft, crew, and mission status to the Field Program Director.

____ 10. Determine next mission status, if any, and brief crews as necessary.

____ 11. Prepare written mission summary using **Mission Summary** form.

Lead Project Scientist Check List

Storm or Project Matthew **Experiment name** _____

Flight ID 20160905I2 **Mission ID** _____

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Cione	Flight Director	Parrish
Radar/Workstation	Ryan	Pilots	
		Navigator	
Cloud Physics		Systems Engineer	
	Kalina	Data Technician	
Dropwindsonde	Cione	Electronics Technician	
AXBT/AXCP		Other	
Photographer/Observers/Guests			

B. Take-off and Landing Times and Locations:

Take-Off: 1906 UTC Location: MacDill

Landing: _____UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

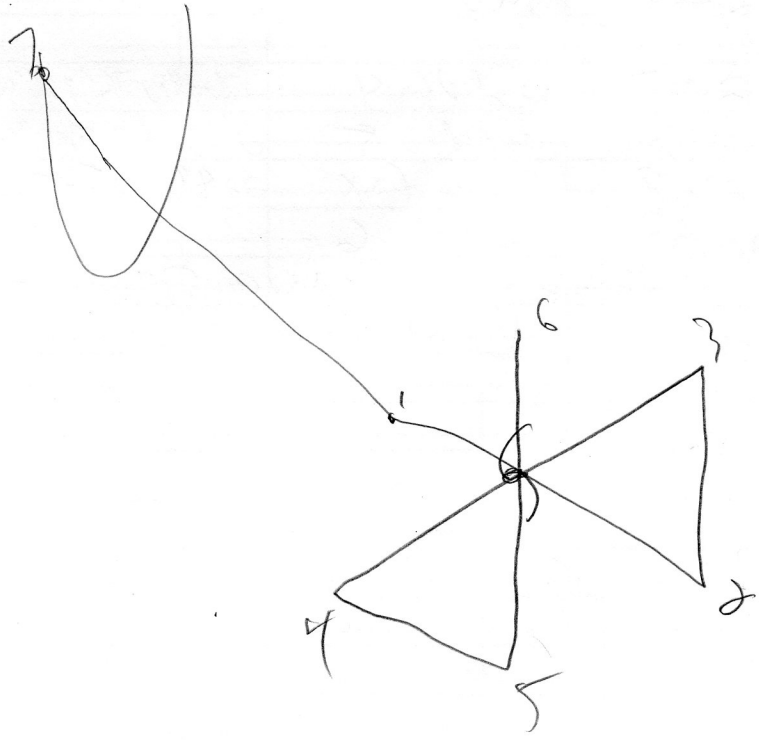
Storm or Project Hurricane Mathew **Experiment name**_____

Flight ID 20161005I **Mission ID**_____

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

Equipment	**Pre-Flight**	**In-Flight**	**Post-Flight**	**# DATs / CDs /Expendables/ Printouts**
Radar/LF				
Doppler Radar/TA				
Cloud Physics				
Data System				
GPS sondes				
AXBT/AXCP				
Ozone instrument				
Workstation				
Cameras				

REMARKS:



Lead Project Scientist Event Log

Date 10/5/16 Flight ID 20161005I2 LPS Cione

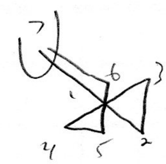
Sun/MUN

Time	Event	Position	Comments
1806	Take Off	MacDill	
1952	IP(1)	"1"	Reg Sonde
2002	Midpoint(1-2)	Mid Pt	IR/BT combo 29.3 / 28.3
967 mb 2016	Center Fix	22'31"; 75'32"	962 sonde 962 extrap (sonde only)
			elliptical eye open to NW
			Major axis 40mi; minor 30 mi
			Diameter
2034	MidPoint(1-2)	21'55"N; 74'33"W	BT/IR combo 25.7
2040	endpt (2)	21'38"N; 74'02"	Reg Sonde
2109	Pt 3	23'24"N; 73'59"	Reg Sonde
2120	Mid Pt		BT/IR
2139	Center Fix	22'43" 75'41"	961mb Dry west side 1/20
2148	MidPt (3-4)		SE quad Strong cells
			BT/IR combo 28 / 22
2157	endPt 4	22'5"N 76'51"W	Reg Sonde
2213	endPt 5	21'5"N 75'45"W	Reg Sonde
2228	Center fix	2248N 7545W	BT/IR Sonde
2247	endPt 6		
	CHANG FEST →		
2311	Drop N. of center		ASCAT Flyover

Mission Summary
<u>Storm name</u>
<u>YYMMDDA#</u> Aircraft 4_RF

<u>Scientific Crew (4 RF)</u>
Lead Project Scientist ___Cione___
Radar Scientist___Kalina___
Cloud Physics Scientist________
Dropwindsonde Scientist___Ryan___
Boundary-Layer Scientist________
Workstation Scientist________
Observers (affiliation)________

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



Mission Synopsis: (include plot of actual flight track)

TDR mission (w/ 5 addl on IR/BTs) Drops (Reg) @ endpoints + IR/BTs @ Center + Mid points 1-2; 3-4
Total 11 Drops

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

Problems:(list all problems)

Expendables used in mission:
GPS sondes : ___11___
AXBTs :___5___

Sonobuoys: ________