Lead Project Scientist

Storm or Project Maria **Experiment type** Coyote
Flight ID 20170924H2 **Mission ID** [redacted]

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 Maria **Experiment name** Coyote

Flight ID 20170924H **Mission ID** _____

A. Participants:

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

B. Take-off and Landing Times and Locations:

Take-Off: 1704 UTC Location: Cleveland

Landing: _____ UTC Location: _____

Number of Eye Penetrations: 14?

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

Storm or Project_____ **Experiment name**_____

Flight ID _____ **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: Plan was to conduct 1 or more UAS eyewall Orbits. Motor failure (2x) in Coyote prevented the execution of the plan. What we got was 2 ~10 min glides to the surface... One in eye one in eyewall

Lead Project Scientist Event Log

Date 9/23/17 Flight ID 20170923H LPS Cione

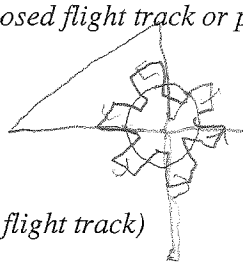
Time	Event	Position	Comments
1704	Take off	Lakeland	
~19:00	Coyote 1	Maria eye	Glide / no motor eye
~19:40	Coyote 2	Maria eye	Glide / no motor eyewall

Mission Summary
Storm name
YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)
Lead Project Scientist Clone
Radar Scientist Ryan
Cloud Physics Scientist
Dropwindsonde Scientist
Boundary-Layer Scientist Zhang
Workstation Scientist
Observers (affiliation)

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

2 Coyote eyewall orbits planned



x 2 + 1 Fig 4 Comm legs

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 : 25
AXBTs : 18

Sonobuoys: