

## Lead Project Scientist

Storm or Project Lane Experiment type TDR  
Flight ID 2018082147 Mission ID 014E Lane

### 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 occasionally 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 Lane Experiment name TDR

Flight ID 2011082141 Mission ID 0714E Lane

**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Abersom</u>	Flight Director	<u>Herning</u>
Radar/Workstation	<u>Abersom</u>	Pilots	<u>Kalen Didier Abitbol</u>
<u>DWL</u>	<u>Ryan</u>	Navigator	<u>Uyato</u>
Cloud Physics	<u>Sellwood</u>	Systems Engineer	<u>Heystek Sanchez</u>
Dropwindsonde	<u>Sellwood</u>	Data Technician	<u>Mascaro</u>
AXBT/AXCP	<u>Bravender CPHC</u>	Electronics Technician	<u>Greene Patel</u>
Photographer/Observer	<u>Bucknell JTWC</u>	Other	
s/Guests			

**B. Take-off and Landing Times and Locations:**

Take-Off: 0202 UTC Location: HNL

Landing: 0452 UTC Location: HNL

Number of Eye Penetrations: 1

**C. Past and Forecast Storm Locations:**

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

**D. Mission Briefing:**

### Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight ID \_\_\_\_\_ LPS \_\_\_\_\_

Time	Event	Position	Comments
0337	BT @ 24-h present position	27.9C	got data below 700m
0404	west point sonde # 1		
0415	first outer band		took pics of sea surface radar display
0427	sonde BT W eyewall		
0430	center drop	955 mb	
	polygonal eyewall		
	stadium shape		
0432	drop E of wall		13.84 150.44 0430067
	large bang, plan to go outside and sample in moat between two large bands.		
0454	sonde E point		
0515	sonde turn inbound		
	Pts of high wind w/ wty inbound		
0531	two eyewall sondes		3.16 bit
0534	center sonde BT near Missville	27.14 BT	21.3 m/s in sonde
0536	sonde SW eyewall very bumpy		13.87 150.66 053424
0550	sonde 500 ft		
0617	sonde SE at		needed to remind Rich about straight legs instead of curves
0631	start circle radar than I wanted		Rich apparently unclear on the problem with his conversation
	~20 m/s		
	Didn't drop sonde BT at beginning as requested		
	for backup		Had to push and repeatedly ask about doing circles in the moat
0644	combs released		
0646	first sondes in winds, backup advanced		
0649	backup BT	27.3C 55T	

Rich would not get us back to original eyewall

