

## Lead Project Scientist

Storm or Project ALoy Cristobal Experiment name TDR  
Flight ID 20140825E7 Mission ID 130A Cristobal

### 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.
- ☒ 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 MGOC in Miami.
- ☒ 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- ☒ 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. Complete Lead Project Scientist Form.
- ☒ 5. 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 turn in to data manager at HRD.
- ☒ 3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ☒ 4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- ☒ 5. Obtain a copy of serial flight data on thumb drive. Turn in with completed forms.

[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

- ☒ 6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- ☒ 7. Determine next mission status, if any, and brief crews as necessary.
- ☒ 8. Notify MGOC 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 AL04 Cristobal Experiment name TRR

Flight ID 20140825I7 Mission ID \_\_\_\_\_

#### A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Selwood</u>	Flight Director	<u>Holmes / Sears</u>
Radar/Workstation	<u>Abrams</u>	Pilots	<u>Ripby / Price</u>
	<u>—</u>	Navigator	<u>Steigman</u>
Cloud Physics	<u>—</u>	Systems Engineer	<u>Klippel</u>
	<u>—</u>	Data Technician	<u>Nacher</u>
Dropwindsonde	<u>Chen</u>	Electronics Technician	<u>Smith / Greene</u>
AXBT/AXCP	<u>Holmes</u>	Other	
Photographer/Observer			
s/Guests			

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

Take-Off: 1753 UTC Location: MacDill

Landing: 0443 UTC Location: MacDill

Number of Eye Penetrations: 1

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

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>1734</u>	<u>24.59</u>	<u>72.38</u>	<u>995</u>	<u>65 Kts</u>
<u>1847</u>	<u>25.02</u>	<u>72.39</u>	<u>993</u>	<u>65 Kts</u>
<u>2010</u>	<u>25.02</u>	<u>72.30</u>	<u>992</u>	<u>36 Kts</u>
<u>215932</u>	<u>24.57</u>	<u>72.15</u>	<u>992</u>	<u>54 Kts</u>
<u>232816</u>	<u>25.01</u>	<u>71.57</u>	<u>990</u>	<u>73 Kts</u>

#### D. Mission Briefing:

AK  
045 2 Kts  
N43  
085 2 Kts  
N43  
104 9 Kts  
087 10 Kts

Vortex



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	↑			
AXB/T/AXCP	↑			
Ozone instrument	?			
Workstation	↑			
Cameras	↑			

#### REMARKS:

got SFMR high incidence close on 1st pass. Concern about not getting first analysis to Eme for 182 cycle. It was suggested that no modules should be run on 1st figure 4 as a rule. GLV sampling near center convection ahead of P3 and dropping — effectively a convective burst module. 2 Extra sondes with IR test held midpoint drop to catch Rmw. 40 m/s at flight level on SE inside of midpoint. Slow steady pressure fall. Crowbar upgraded to hurricane based on SE quadrant observations. Special advisory after 800pm EDT. frequent lightning on final pass.

## Lead Project Scientist Event Log

Date 8/25/14 Flight ID 20140825I1 LPS Sellwood / Andersen

[illegible]



## Mission Summary

### Storm name

YYMMDDA# Aircraft 4\_RF

### Scientific Crew (4 RF)

Lead Project Scientist Schwab / Anson

Radar Scientist Abersen

Cloud Physics Scientist \_\_\_\_\_

Dropwindsonde Scientist Hua Chen

Boundary-Layer Scientist \_\_\_\_\_

Workstation Scientist \_\_\_\_\_

Observers (affiliation) \_\_\_\_\_

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

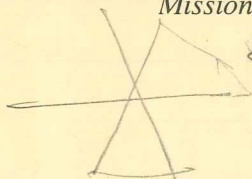


Figure 4 with extra leg  
120 nm legs

*Mission Synopsis: (include plot of actual flight track)*

TDR to EMC main objective will insert convective  
burst module SE of center if anything is there on  
final leg. Also IR drop test and main incidence SFMR  
test if possible

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

*Problems: (list all problems)*

*Expendables used in mission:*

GPS sondes : \_\_\_\_\_

AXBTs : \_\_\_\_\_

Sonobuoys: \_\_\_\_\_