

Lead Project Scientist

Storm or Project AL042014

Experiment name TDR research

Flight ID 2014082411

Mission ID 0904A CHRISTOPAL

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 ALOY 2014 Experiment name Research / TOR
 Flight ID 20140824 I1 Mission ID 0904A Christobal

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Sellwood</u>	Flight Director	<u>Homes / Sears</u>
Radar/Workstation	<u>Amerson</u>	Pilots	<u>Kibby / Price</u>
		Navigator	<u>Speck</u>
Cloud Physics		Systems Engineer	<u>Klippel / Lalonde</u>
		Data Technician	<u>Green / Smith</u>
Dropwindsonde	<u>Ohnen</u>	Electronics Technician	<u>Nadler</u>
AXBT/AXCP	<u>SFmr / Holbach</u>	Other	
Photographer/Observer	<u>Suppl / Frauer</u>		
s/Guests	<u>Cassidy</u>		

IRAP
media

B. Take-off and Landing Times and Locations:

Take-Off: 1755 UTC Location: MacDill

Landing: _____ UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

IP 24.24 75.02

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
182 8/24	24.12N	72.46W	1001	40 KTS
1933	24.24	7332	999	38 KTS
2117	2432	7257	AF fix	45 KTS
2153	2424	7256	999	45 KTS
2319	2417	7305	999	45 KTS

D. Mission Briefing: TOR mission if FTP problem is resolved otherwise HRD research mission. will try to execute mfr incidence SFmr test in 2-30 Kt rainfree region with incident with IRAP request

1747 Vortex
 10 6 KTS
 0 6 KTS
 340 6 KTS
 from plane
 at 202
 275 2 KTS

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:

read TDR analysis from 08231 flight
 & stop'd to home. FTP still down at start of flight expected
 to be back up before 1st radar analysis is finished. storm
 appears to be under more snow than indicated on AMS,
 max winds at turn 2425 71.4 23.5 m/s, max
 flight level wind further out. Cut leg short due to
 convection at turn point about 20 nm short. Creating
 job files on AZ, from 2113 - 2141 computed (3) 15° (3) 30°
 (3) 45° bearing circles for SFMR calibration during this time in
 LF was switched off. Cut PW leg 2 short to avoid turning
 in convection about 20 nm short. Then noticed a
 bug in ASPEN skew parameters - unable to change plotting
 max winds near turn into final pass. Last job file
 created on the ground

Lead Project Scientist Event Log

Date 8/24 Flight ID 20140824I7 LPS Sellwood

[illegible]

Start radar \rightarrow
cancel

Mission Summary

Storm name

YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)

Lead Project Scientist Schwartz/Abrson

Radar Scientist Abrson

Cloud Physics Scientist _____

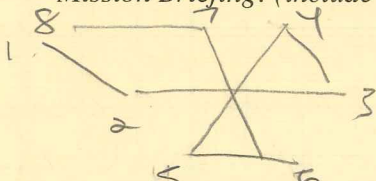
Dropwindsonde Scientist Chen

Boundary-Layer Scientist _____

Workstation Scientist _____

Observers (affiliation) Holbach FSU (SFMR)

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



drops at center & mid points
with possible rmw drop on SE side
of storm. Not ENC tested but will
try to get TDR data into tank.

Mission Synopsis: (include plot of actual flight track)

high incidence test on second leg following 1st
midpoint drop (3) 15° arc (3) 30° arc + (3) 45° arcs.
RMW on SE side just after turn - was not able to
get a drop out

Try to get SFMR high
incidence data

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

All objectives met - TDR data made it into ENC
data tanks SFMR maneuvers were completed successfully
Tested new radar scripts to transit to alternative ftp
site with positive results

Problems: (list all problems)

FTP down until last leg of flight - alternate site was
working in the meantime. All data made it to ENC
data tank.

Expendables used in mission:

GPS sondes: 0

AXBTs: 0

Sonobuoys: 0