

Lead Project Scientist

Storm or Project Richard Experiment name Air-Seq/Rapid
Flight ID 101023II Mission ID 100003
Preflight WX19A RICHARD

- ☒ 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.

no but send
HOBS + vortex

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 TS Richard Experiment name Air Sea / Thermo
 Flight ID 101023I1 Mission ID WX19A RICHARD2

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Barry Daniceno</u>
Radar/Workstation	<u>Aperson/Toni</u>	Pilots	<u>Mark Nelson, AK</u> <u>Granada, KAH</u>
Cloud Physics		Navigator	
Photographer/Observer		Systems Engineer	<u>Greg Bast</u>
/Guests		Data Technician	<u>Bill</u> <u>Mike</u>
Dropwindsonde	<u>Aperson/Toni</u>	Electronics Technician	<u>Olney</u>
AXBT/AXCP	<u>M. Black</u>	Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0205 UTC Location: Mac Dill

Landing: 1010 UTC Location: Mac Dill

Number of Eye Penetrations: 3

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>23/0049</u>	<u>15° 45'</u>	<u>82° 12'</u>	<u>1008</u>	<u>40 kt</u>
<u>23/06Z</u>	<u>16.2</u>	<u>82.5</u>		<u>45</u>
<u>23/18Z</u>	<u>16.3</u>	<u>83.7</u>		<u>50</u>
<u>24/06Z</u>	<u>16.7</u>	<u>85.3</u>		<u>60</u>
<u>24/18Z</u>	<u>17.2</u>	<u>86.9</u>		<u>75</u>

D. Mission Briefing:



Storm or Project Richard Experiment name Air-Sea

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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	CON ✓	✓	✓	
Data System	✓	✓	✓	
GPS sondes	✓	✓	✓	
AXBT/AXCP	✓	✓	✓	
Ozone instrument				
Workstation	✓	✓	✓	
Cameras	✓	✓	✓	

REMARKS:

Radar froze up briefly
a few times

Lead Project Scientist Event Log

Date 10/23/10 Flight ID 101023I1 LPS M. R. Ledt
Richard (Pg 1)

Time	Event	Position	Comments
0420Z	Descend to 12AFT	18.37 85.54	
#1 042614	Sonde/AXBT	17.93 85.58	~150 nm WNW of station
#2 044016	Sonde/AXBT	16.89 85.66	28.0°C
#2A 044218	Sonde 2A Backup	16.85 85.53	28.2°C
#3 045108	Sonde/AXBT	16.68 84.90	28°C 60m 45m mLP
#4 050241	Sonde/AXBT	16.44 84.06	Near NE shoreline
			Coast 28.10°C
#5 051330	Sonde/AXBT	16.22 83.27	IP of butterfly
			28.20°C
#6 052348	Sonde/AXBT	16.16 82.50	ctr of W-ctr
			Center is west of forecast
#7 053324	Sonde/AXBT	16.1 81.8	supposed to be center
0543	Convective band - lightning		
16.0 81.0	Grapel		
#8 054346	16.05 81.0 - Sonde/AXBT		
	Descend to 11AFT - grape		
#9 055410	Sonde/AXBT	16.03 80.3	East point 28.5°C
#10 060347	Sonde/AXBT	Mid pt downwind	16.7 80.69
#11 061302	Sonde/AXBT	17.26 81.07	NE point
#12 062430	Sonde/AXBT	16.55 81.48	Mid point
063920	Turn at 16.15 82.38		near center and near coast
	cont'd		
065330	Descend to 5AFT		
#13 065509	Sonde/BT	15.8 81.6	

Can't fly to ctr because
 do land

