Lead Project Scientist

Storm or Project Richard **Experiment name** Air-Sea/Rapid
Flight ID 101023I1 **Mission ID** NOAA3
WX19A RICHARD2

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.

NO, but send HDOBS + vortex

___ 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.

X-check 7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.

N/A 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.

Yes 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 TS Richard **Experiment name** Air Sea/Rapid Thermo

Flight ID 101023I1 **Mission ID** WX19A RICHARD2

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	M. Black	Flight Director	Barry Damiano
Radar/Workstation	Aberson/Toni	Pilots	Mark Nelson, AJ Gravonte[illegible], Kathy
		Navigator	
Cloud Physics		Systems Engineer	Greg Bast
Photographer/Observer /Guests		Data Technician	Mike
Dropwindsonde	Aberson/Toni	Electronics Technician	Bill Olney
AXBT/AXCP	M. Black	Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0205 UTC Location: MacDill

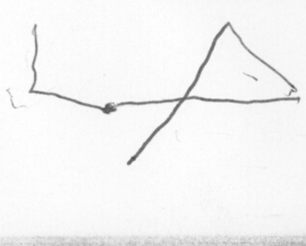
Landing: 1010 UTC Location: MacDill

Number of Eye Penetrations: 3

C. Past and Forecast Storm Locations:

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

D. Mission Briefing:



Storm or Project Richard **Experiment name** Air-Sea

Flight ID 100231 I **Mission ID** WX19A RICHARD2

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 CCN	✓	✓	?	
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. Black

Richard

Pg 1

Time	Event	Position	Comments
0420 Z	Descend to 12kft	18.37 85.54	
#1 042614	Sonde/AXBT	17.93 85.58	~150 nmi WNW of storm 14
#2 044016	Sonde/AXBT	16.89 85.66	28°C 12
#2A 044218	Sonde 2A Backup	16.85 85.53	28.2°C 9
#3 045108	Sonde/AXBT	16.68 84.90	25°C 60m 45m MLD 16
#4 050241	Sonde/AXBT	16.44 84.06	Near NE Honduras coast 28.1°C
#5 051330	Sonde/AXBT	16.22 83.27	IP of butterfly 12 28.2°C 14
#6 052348	Sonde/AXBT	16.16 82.50	ctr of W-ctr leg
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	Graupel	
#8 054346	16.05 81.0 - Sonde/AXBT		
	Descend to 11 kft - graupel		
#9 055410	Sonde/AXBT	16.03 80.31	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/BT	16.55 81.46	Mid point
063920	Turn at	16.15 82.38	near center
	and near coast		
	can't find a ctr		
065330	descend to 5 kft		
#13 065509	Sonde/BT	15.8 81.6	

can't fly to ctr because [illegible] land

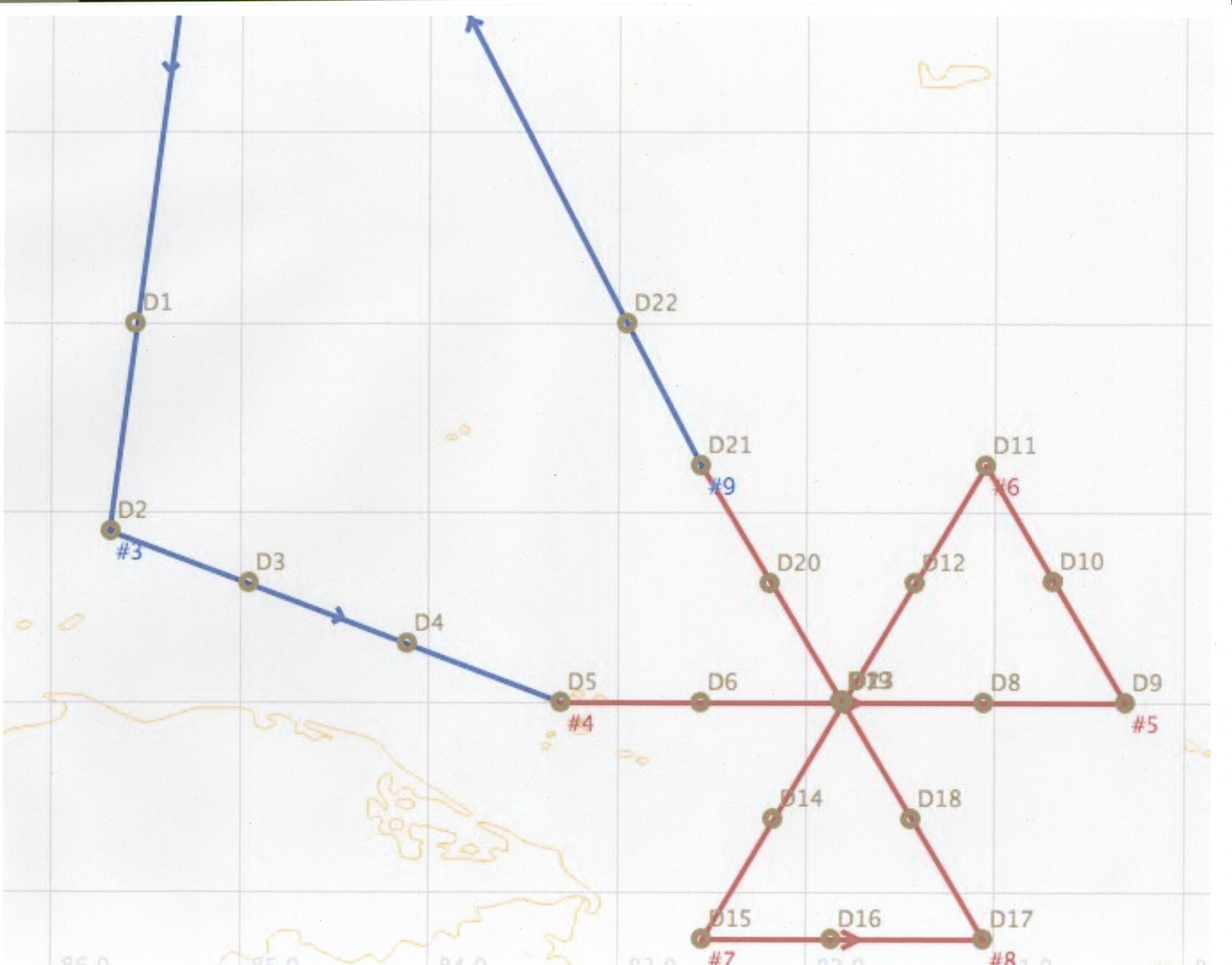
Lead Project Scientist Event Log

Date 10/23 Flight ID 10023I1 LPS M. Black

Richard Pg 2

Time	Event	Position	Comments
070525	Sonde/AXBT	15.63	81.65 Hdg west
to	Follow	Coasting	
071218	Sonde/AXBT	15.6	81.93 near
072657	Sonde AXBT	16.26	81.710 coast
0240	Sonde AXBT	17.0	82.4
	Mid level center		
	in Doppler analyses		
10720	Sonde / AXBT		
1010	Landing		

14 near strong convection 14


D1
D22
D21
#9
D11
#6
D2
#3
D3
D20
D12
D10
D4
D5
D6
D8
D9
#4
#5
D14
D18
D15
D16
D17
#7
#8