E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

___ 1. Participate in general mission briefing.

___ 2. Determine specific mission and flight requirements for assigned aircraft.

___ 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist and CARCAH unless briefed otherwise by field program director.

___ 4. Contact HRD members of crew to:

a. Assure availability for mission.
b. Arrange ground transportation schedule when deployed.
c. Determine equipment status.

___ 5. Meet with AOC flight crew at least 90 minutes before takeoff, provide copies of flight requirements, and provide a formal briefing for the flight director, navigator, and pilots.

___ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 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 Form E-2.

E.2.3 Postflight

___ 1. Debrief scientific crew.

___ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).

___ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

___ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.

___ 5. Determine next mission status, if any, and brief crews as necessary.

___ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

___ 7. Prepare written mission summary.

On-Board Lead Project Scientist Check List

Date 15 August 2008 Aircraft N42RF Flight ID 080815H

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Aberson (Rogers)	Flight Director	Damiano
Cloud Physics	—	Pilots	Guimonte / Nelson
Radar	Murillo	Navigator	Siegel
Workstation	Leighton	Systems Engineer	Bert / Wade
Photographer	Murillo	Data Technician	Park
Omegasonde	Murillo	Electronics Technician	Barlow / Bako / Olney
AXBT/AXCP	—	Other	

Take-Off: 145557 Location: Barbados Landing: ______ Location: Barbados

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

C. Mission Briefing:

Butterfly pattern, avoiding land. System still not officially a depression

D. Equipment Status

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft			
Radar/LF			
Radar/TA (Doppler)			
Cloud Physics	—	—	—
Data System			
Omegasondes			
AXBT/AXCP	—	—	—
Workstation			
Photography			

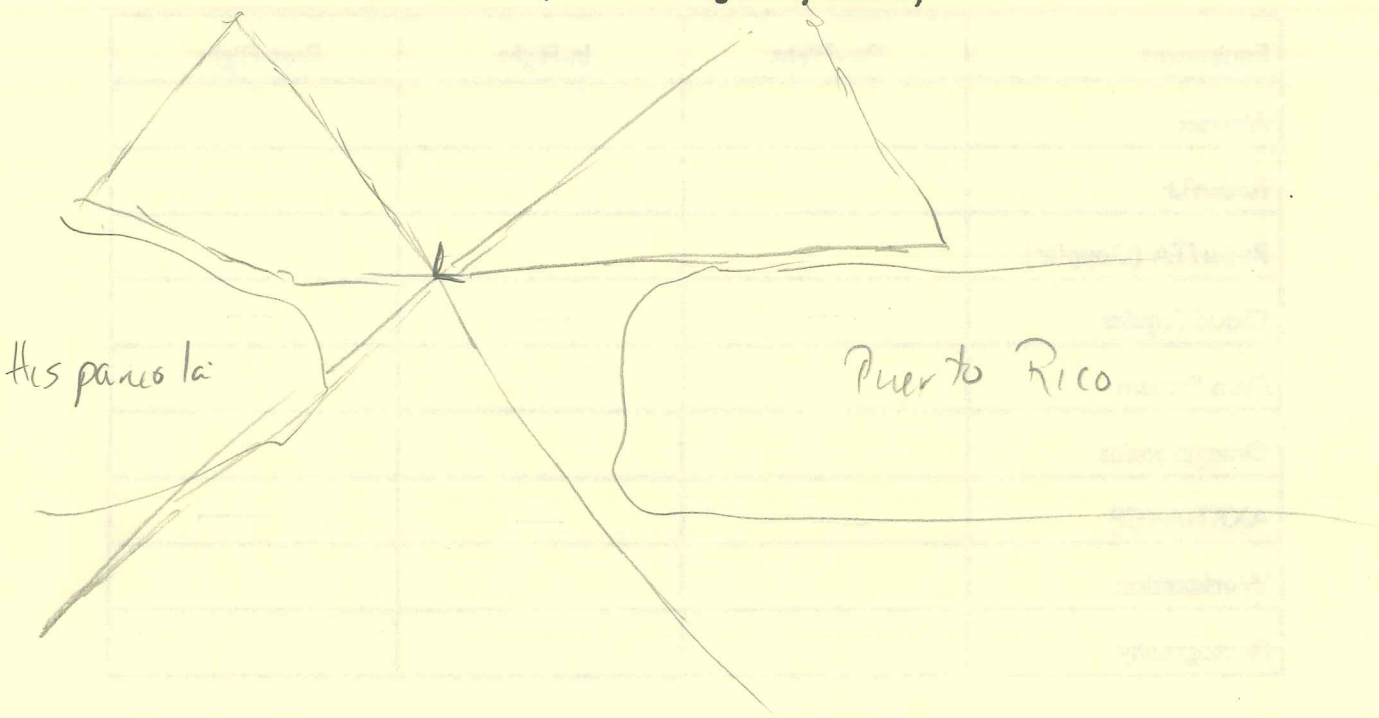
REMARKS:

Dropsonde Accounting

HRD: 7

NWS: 7

E. (I) **Proposed Flight Pattern** (sketch or designate by number)



E. (II) **Actual Flight Pattern**

w-C47

Lead Project Scientist Event Log

Date 15 August 2008 Flight 080815 H LPS Aberson

18.5 68.2 NHC drop request

Time	Event	Position	Comments
145557	Departure	Barbados	No initial problems.
~1620	descending for weather		
1644	into weather, turn to IP	16 50 66 30 track 312°	
1649	convection		12 ms⁻¹ up
1650			10 ms⁻¹ up, 2 ms⁻¹ down, 11 ms⁻¹ up
165230	IP		track 330°, begin radar leg
1659	follow the winds		track 300°
1715	right turn to 010° avoid land, to continue		53 kt SFMR
1717	NHC-requested drop	did not reach surface	Drop #1
	Looks like center just off SE tip of Hispaniola in confluent/inflow feature		
1743	N PT drop turn to 240°		Drop #2
1758	turn slightly early due to small cell		
1800	track 135°		Drop #3
1810	slight turn around convection		
1818	10° turn to right for convection		SFMR 50 kt in rain
1821	track 100°		Drop #4 nearest center, convergence zone
1847 / 1848	turn downwind, track 345°		Drop # 5
1859	turn inbound	track ~225°	Drop #6
1923		track 235°	
1928		track 240°	
1930			Drop # 7 HRD

43 kt FL

NWS (Drop #1)

NWS (Drop #2)

NWS (Drop #3)

NWS (Drop #4)

NWS (Drop #5)

NWS (Drop #6)

HRD (Drop #7)

Lead Project Scientist Event Log

Date 15 August 2008 **Flight** 080815H **LPS** Aberson

Time	Event	Position	Comments
1950	turn toward convective module		Drop #8 NWS
	track 180°		
1957/1958	track 240°	convective module	Drop #9 HRD HRD
2004	track 150°		Drop #10 HRD, late inside HRD
2012	track 055°		Drop #11 HRD HRD
2014	track 045°, up moat between convection and stratiform		lightning flashes in convection
2018	track 035°		180° degree wind shift around convective feature & flight level
2021	track 025°		
2026			Drop #12 HRD fast fall HRD
2028			Drop #13 HRD bad sonde HRD
2030			Drop #14 HRD HRD
2031	exit pattern		
2259	landed		

69.3 surface center, 5 coast

BGI MIA 2:45pm