050919I

Lead Project Scientist

Preflight

____ 1. Participate in general mission briefing.

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

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

____ 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.

____ 5. 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.

____ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami).

____ 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.

____ 7. Make sure each HRD flight crew members have life vests

____ 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

____ 8. Collect "mess" fee ($2.00) from all on-board HRD flight crew members.

In-Flight

____ 1. Confirm from AOC flight director that satellite data link is operative (information).

____ ? 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. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to MGOC.

____ 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. Obtain a copy of the radar DAT tapes. Turn in with completed forms.

____ 6. Obtain a copy of the all VHS videos form aircraft cameras (3-4 approx.). Turn in with completed forms.

____ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.

____ 8. Determine next mission status, if any, and brief crews as necessary.

____ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.

____ 10. Prepare written mission summary using **Mission Summary** form (due to Field Program Director a week after the flight).

Lead Project Scientist Check List

Storm or Project RITA / IFEX Experiment name IFEX / RAINEX
Date 9/19/05 Aircraft 43 Flight ID 050919I

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	M. Black	Flight Director	Marty Mayeaux / Barry
Radar	M Black	Pilots	Mike Silah, M. Nelson, Randi Tebaest
Workstation	M. Black	Navigator	Pete Siegel → Dewie Floyd
Cloud Physics	—	Systems Engineer	Terry Lynch, Joe Klippk
Photographer/Observer /Guests	Paul Chang, Rob, Davidson, Trad	Data Technician	Dale Carpenter, Ray Tong
Dropwindsonde	M. Black	Electronics Technician	
AXBT/AXCP	←	Other	Tom McFadden

B. Take-off and Landing Times and Locations:

Take-Off: 1455 UTC Location: St. Croix

Landing: ~~2300~~ 2247 UTC Location: MacDill

Number of Eye Penetrations: 3

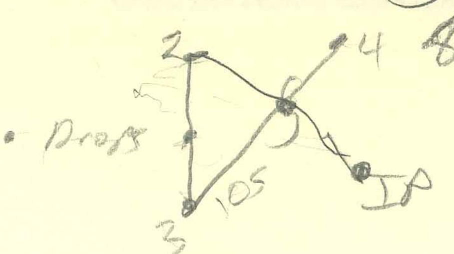
C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
19/18Z	23.1	76.0	~995	~50 kt

D. Mission Briefing:

SFMR Tasked MTF500L

8,000 ft, RAINEX coordination w NRL P3 at end - will join us near pt-3 - do radar and work on NW-NE quadrants



D or U

Lead Project Scientist Event Log

Date 9/19/05 **Flight** 050919I **LPS** M. Black

Rita

Time	Event	Position	Comments
1455	Takeoff	St. Croix	
1513	Radar On		
1627	F/AST ON		
1714	Drop #1	105 nmi se of ctr	
1732	SE eyewall – 62 kts		SFMR RH-lvl – 52 kts
1738	Eye	23.09 75.86	991.5 mb
1744	NW eyewall – 48 kts		Fl-lvl – 50 kts 65C
1754	In Rainband	NW of eye	– 65 kts Fl-lvl
1804	NW point	105 nmi out	– 55 kts 58C
1806	Drop #2	NW point	
1817	Drop #3	Rainband west side	
1837	Drop #4	SW point	
1850	Drop #5	SW eyewall	
1856	Eye 23.1 76.0		
1857	Drop #6	inside edge eye SW	
1923	Drop #7	NE point 105 nmi NE	
1934	Drop #8		
1941	Drop #9	Rainband N side	
1948	Drop #10		
1957	Drop #11		
2004	Drop #12		
2018	Drop #13		
2025	Drop #14		
2042	~75 miles south of ctr – turn north to eye		
2052	eye 23.1 76.37°		Drop 15
2124	Drop 16	NW side	

Rainband Channel NE – N – W – SW (drops 1934–2025)

2124 – Drop 16 near band NW side