050923H

Lead Project Scientist

Preflight

MB 1. Participate in general mission briefing.

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

MB 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.

MB 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).

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

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

MB 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).

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. 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 **Experiment name** Ocean Winds/Rainex
Date 9/23/05 **Aircraft** N42 **Flight ID** 050923H

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	M. Black	Flight Director	Tom Shepherd
Radar		Pilots	Phil Kennedy, Tom Strong
Workstation	M. Black	Navigator	Tim Gallagher
Cloud Physics	—	Systems Engineer	Greg Bast
Photographer/Observer /Guests	2 P. Chang guest	Data Technician	Sean McMillen
Dropwindsonde	Melicie Rocketts	Electronics Technician	Bill Olney, Beth Kerr
AXBT/AXCP	Melicie Perffeli	Other	Paul Chang +5

B. Take-off and Landing Times and Locations:

Take-Off: 1454 UTC Location: Mac Dill

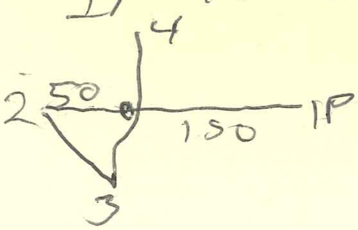
Landing: ________ UTC Location: ________________

Number of Eye Penetrations: about 30, man

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
	27.2	.	929	130 kt

D. Mission Briefing: Ocean Winds/RAINEX/IFEX
Inner core mission at 5-7 kft.
IP 150 nmi east of ctr, then Fig 4.
radials in and



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Lead Project Scientist Event Log

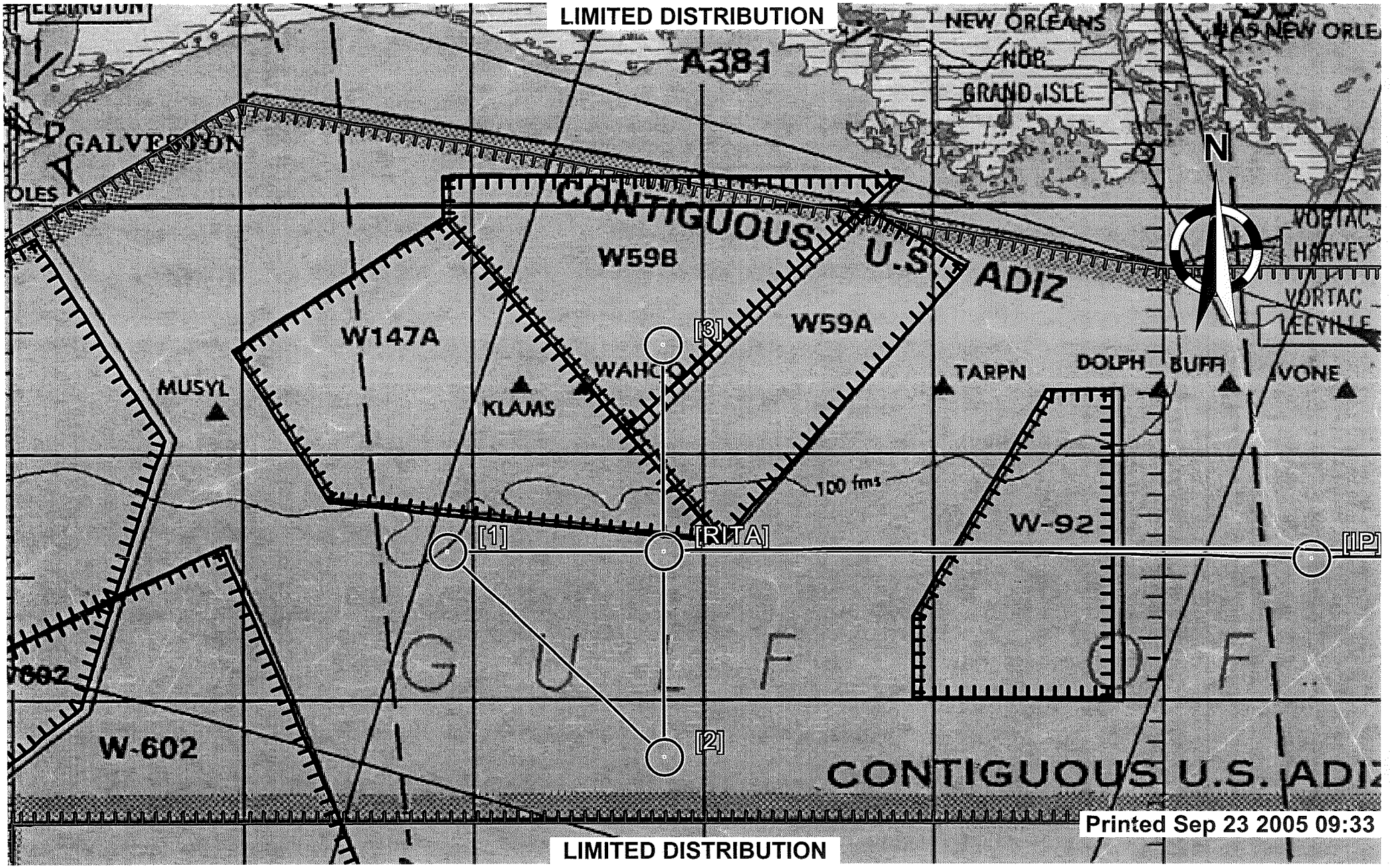
Date _____ **Flight** _____ **LPS** _____

	Time	Event	Position	Comments
	1454	Takeoff	Hdq WSW	
~	1510	Radar started		
	1543	Thin rainband NW-SE 320 mi ahead		
	~1625	near IP #1		
	~1648	Large RB 80-60 mi E		
R1	1648	Outer RB (eyewall) 55mi from ctr (150 SFMR)		
		Local wind max		
D2	1655	East Eyewall		
D3	1700	Eye 27.63 -92.14		
D4	1707	west eyewall		
D5	1717	50 mile west in RB		
D6	1725	~55 mile SW along Band		
BT#	1725	AXBT along band 28.3°C → 45 mLD		
D7	1734	Drop ~30 miles to south		
	1736	Resetting Radar		
	1738	Radar up		
D8	1739	South eyewall	70Kts o RSFMR	
	1743	eye	27.8 92.2	
	1750	50 nmi S		
D9	1791	Just outside of eyewall		
	1800	End of downwind leg outside of RBE EW		
	180230	Track SE to eye from NW		
R10			NW wall	
P R11				
D12				
D13				
		West eyewall		no Sondes

Lead Project Scientist Event Log

Date ________________ Flight ________________ LPS ______________________

Time	Event	Position	Comments
	Outbound to NW to fix sonde tape		
	Circling in eye while fixing tube		
D15 184855	SW eyewall		
1854	Turn to SE about 30 miles out		
P D16 190703	South eyewall		
	Radials in and out of eye		
	Circling in eye to fix ASOS		
	circling later to fix GPS		
	Final exit thru North eyewall		
	extreme turbulence		
	+/- 2.5 g, very heavy		
	graupel		


NEW ORLEANS
NOB
GRAND ISLE
A381
GALVESTON
CONTIGUOUS U.S. ADIZ
W59B
W59A
W147A
MUSYL
KLAMS
WAHCO
TARPN
DOLPH
BUFF
HARVEY
VORTAC
100 fms
W-92
[1]
[RITA]
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[2]
[3]
W-602
CONTIGUOUS U.S. ADIZ
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