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).

____ 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

Date 9-14-2007 **Aircraft** N42RF **Flight ID** 070914H

A. Participants: 0208A Ingrid

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Eric Uhlhorn	Flight Director	Paul Flaherty
Radar	Paul Leighton	Pilots	Strong/Newman
Workstation	"	Navigator	Joe Bishop
Cloud Physics	N/A	Systems Engineer	
Photographer/Observer /Guests		Data Technician	
Dropwindsonde	Eric/Paul	Electronics Technician	
AXBT/AXCP	Eric U.	Other	Ocean Winds Crew

B. Take-off and Landing Locations:

Take-Off: _____ Location: Barbados

Landing: _____ Location: Barbados

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

- Figure 4, 80 nmi legs
- Inner box, 40 nmi length
- Outer box, 120 nmi length

- Doppler Winds Mission

Lead Project Scientist Event Log

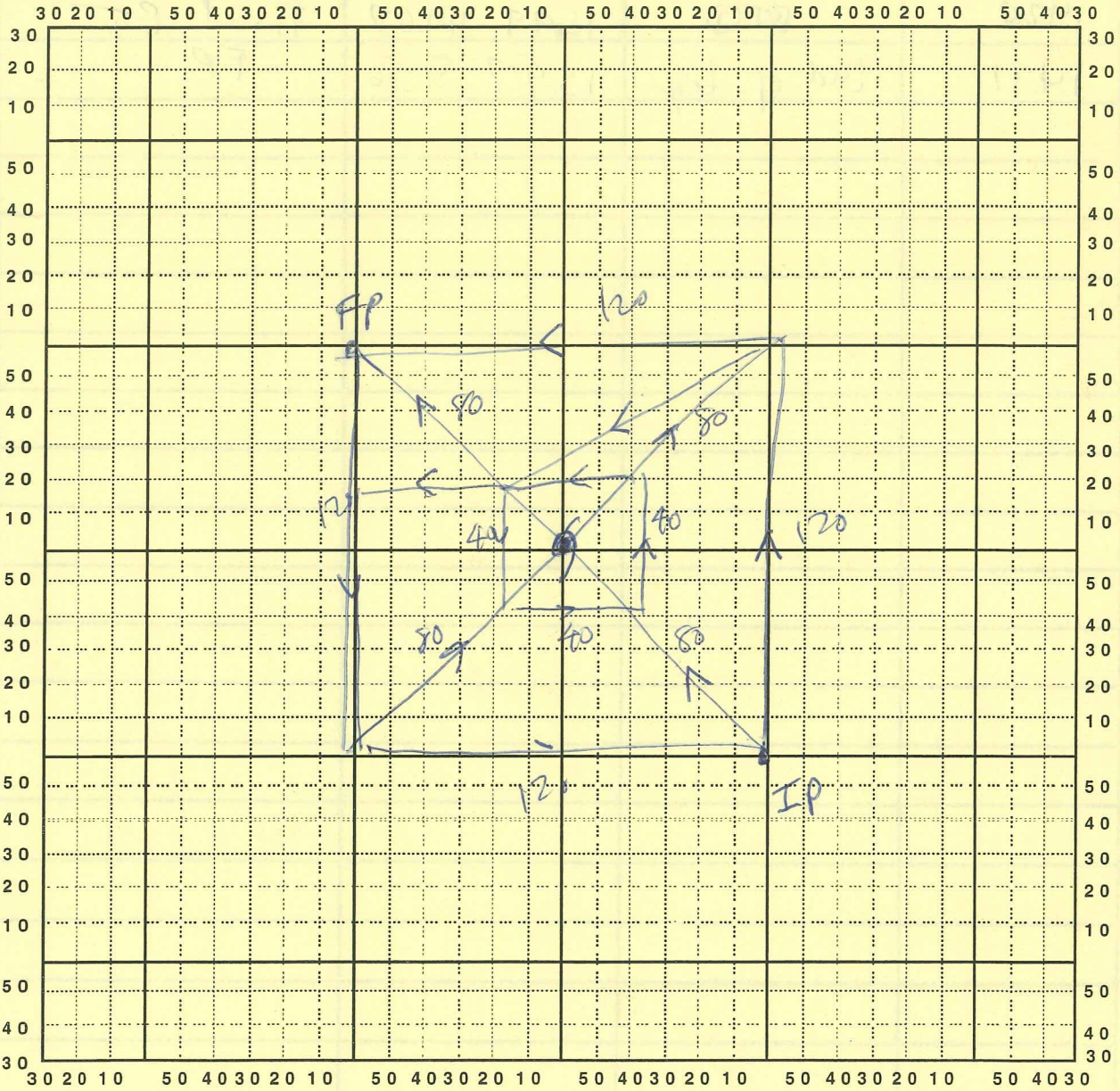
Date 2007-09-14 **Flight** 070914H1 **LPS** Eric C.

Time	Event	Position	Comments
0721 Z	Takeoff	Barbados	
0750			Disabled Ch 2 SFMR
~~0825~~			due to IWRAP RFI
0825			Reset Radar
0858	Descend to FL 30		
0930	Descend to 5000'		
0952	IP	14.4 N 048 16.9'	
0952	GPS ① AXBT ①	14.17 48.23	
1002	GPS ②	14.57 48.75	
1007	GPS ③	14.78 48.97	SFMR 16 m/s
1017	GPS ④ BT ②	15.09 49.86	center
1022	GPS ⑤	15.30 49.80	SFMR 17 m/s
1028	GPS ⑥	15.58 50.09	
1039	GPS ⑦ BT ③	16.06 50.59	SFMR 19 m/s
1054	BT ④	15.17 50.68	SST 28.1
1110	GPS ⑧ BT ⑤	14.17 50.59	SST 27.9 SFMR 14 m/s
1118	GPS ⑨	14.52 50.19	Heavy Rain drop SFMR 25 m/s RR 30 mm/hr
1122	GPS ⑩	14.67 50.05	
1127	GPS ⑪	14.84 49.87	SFMR 16 m/s
1135	GPS ⑫	15.05 49.76	Center Fix
1142	GPS ⑬	15.29 49.41	SFMR 17 m/s
1146	GPS 14	15.56 49.23	
1156	GPS ⑮ BT ⑥	16.04 48.74	80 nmi NE
1157	turn to box 1		
1337	BT ⑦	14.15 49.80	60 mi S
1402	BT ⑧		60 M E
1411	turn final outer box leg	15.97 49.10	

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date _____ Flight ID _____ LPS _____.



Note : Label full degrees according to location of the flight area.

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

Time	Event	Position	Comments
1420	BT ①	15.99 49.67	Final BT
1431	End of leg	15.97 50.56	FP

Mission Summary
Storm name
YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)
Lead Project Scientist Eric Uhlhorn
Radar Scientist Paul Leighton
Cloud Physics Scientist
Dropwindsonde Scientist Eric / Paul
Boundary-Layer Scientist Eric
Workstation Scientist Paul
Observers Ocean Winds crew

Mission Briefing: (include sketch of proposed flight track or page #)
See flight track sketch

Mission Synopsis: (include plot of actual flight track)
Flight proceeded as planned, with the exception of shortened outer box leg East of Storm (80 mi instead of 120) for fuel reasons.

Evaluation: (did the experiment meet the proposed objectives?)
Mission went off without a hitch. All Sondes/AXBTs good. Both doppler analyses completed and transmitted.

Problems:(list all problems)

Expendables used in mission:
GPS sondes : 15
AXBTs : 9
Sonobuoys: