

Lead Project Scientist

Mee
HRD

N43RF

Storm or Project Hurricane Bill Experiment name Ifex
Flight ID WX03A Billy Mission ID 090819IB

Nick

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.
- 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.
- 7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.
- 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- 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.

On final Pass E → W
South + West Side study to fill
in. also eye

Lead Project Scientist Check List

Storm or Project Hurricane Bill Experiment name Ilex
 Flight ID WY03A-B114 Mission ID 090819TB

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Clone</u>	Flight Director	<u>Parrish/Henry</u>
Radar/Workstation		Pilots	<u>Choy</u>
	<u>Garnache</u>	Navigator	
Cloud Physics	<u>-</u>	Systems Engineer	
Photographer/Observer /Guests	<u>-</u>	Data Technician	
Dropwindsonde	<u>Amere</u>	Electronics Technician	
AXBT/AXCP		Other	

B. Take-off and Landing Times and Locations:

Take-Off: 1945 UTC Location: Barbados
 Landing: _____ UTC Location: Bahamas
 Number of Eye Penetrations: 4

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

Looks like on our N-S
 Pass storm had a dynamic eye with 15-wind
 flying to form inside the "1/2 Convective"
 (30m) eye wall. Very cool track to make R.

Storm or Project Bill Experiment name _____

Flight ID _____ Mission ID 090819IB

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	✓	✓		
Data System	✓	✓		
GPS sondes	✓	✓		
AXBT/AXCP	—	—		
Ozone instrument	—	—		
Workstation	✓	✓		
Cameras	✓	✓		

REMARKS:

~~max v = 150 kts~~
 very intense flight.
 frequent IR sat imagery though
 shows -80F on W+SW as
 convec on E+NE crop around
 120 kts by far stage 1 in storm
 in NE quad. Note: despite no
 con on W+SW still had a steady
 eye!

Lead Project Scientist Event Log

43
550

Date 9/19/08 Flight ID 090819IB LPS - Crene

Time	Event	Position	Comments
1955	Takeoff	13.0759.51	5 min early
2040	UPS Smoking		near mission Cancellation - Found + renewed IRAP UPS
21:36:30	IP/2	18.76 56.35	~ 1105 m, SE B. 11
21:47	Mid-2	19.32 56.98	Just
21:51	" "	19.35 57.03	Backup to 2
2156:38	"eyeball SE	19.75 57.51	88 Max FL 115
222	eye	19.57 57.48	MSL 945 extra
2204	eyeball NW	20.08 57.96	eyeball - operator
2212	55m NW	20.50 58.24	55m NW -
2224	105m	21.09 59.05	105m NW
225322	105m SW	18.82 59.18	most to take 800
230545	55m SW	19.43 58.58	eyeball, 51008 ran fr
2315	SW "eyeball"	19.97 58.11	Max 79
2322	NE "	20.35 57.77	140 FL 1055 FW
2332	55 NE	20.77 57.33	55 NE
2343	55 NE	21.31 57.74	Massive RB can
2177	55 N	21.19 58.27	Me Barb Jun 10 fu
0232	NE wall	20.54 58.31	40-45 DBZ (11000) SFM
0472	55m S	19.24 58.32	no conv
01012	105 S	18.42 58.35	stable to east
01542	eyeball	20.50 58.46	still open tower Max U ₁₀ = 90 kt
02002	Center fix	20.44 58.71	

Added Eyeball Drop on E side
Deleted 5 exit eyeball
22 total

Mission Summary

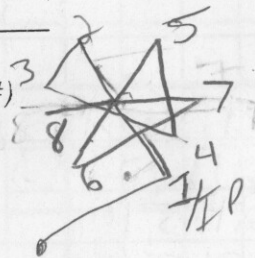
Storm name

YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)

Lead Project Scientist Clare
Radar Scientist Orlando
Cloud Physics Scientist -
Dropwindsonde Scientist Anne
Boundary-Layer Scientist -
Workstation Scientist Anne
Observers -

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



Mission Synopsis: (include plot of actual flight track)

22 Drops Leg 1-2: 7
leg 3-4: 6
leg 5-6: 6
leg 7-8: 3

Evaluation: (did the experiment meet the proposed objectives?)

Problems: (list all problems)

Expendables used in mission:

GPS sondes: _____

AXBTs: _____

Sonobuoys: _____

Plan is to get full coverage out to 105 nm radial legs
FL = 10K ft (no eye radar)
also w/ Dwyer to N + W goal to see if "614" "no no" "325"