050909H Ophelia

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

MB 1. Participate in general mission briefing.

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

Yes 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.

Me 4. Contact HRD members of crew to:

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

Yes 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.

all good 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 9/9/05 Aircraft 42RF Flight ID 050909H

H. Ophelia

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	M. Black	Flight Director	Jack Parrish
Cloud Physics	—	Pilots	Kennedy, Strong, Wilson
Radar	M. Black	Navigator	Devin Brakob
Workstation	M. Black	Systems Engineer	Greg Best
Photographer/Observer	—	Data Technician	Sean McMinn
~~Omegasonde~~ GPS	M. Black	Electronics Technician	Bill Olney
AXBT/AXCP/Guest	M. Black	Other	P. Chang + 3 others

Take-Off: 0130 Location: MacDill

Landing: _____ Location: _____

Number of Eye Penetrations: ~~4~~ 5

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
08/21Z	28.6	79.5	985	~~65~~ kt
09/06	29.0	79.2	?	70 kts

C. Mission Briefing:

9 Sept. — might be cancelled

~~0400~~ 03Z, 06Z, 09Z fixes

5K Ft, Alpha pattern 105 nm; leg, Sondes at 75 nms, RMW, Eye, + may be some

HRD AOC AOC P. Chang drops

6 AXBTs

D. Equipment Status (Up, Down, Not Available, Not Used)

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft	✓	✓	
Radar/LF	✓	✓	
Radar/TA (Doppler)	✓	✓	
Cloud Physics	—	—	
Data System	✓		
~~Omega~~sondes	✓		
AXBT/AXCP 6	✓		
Workstation	✓	✓	
Videography	—	—	

REMARKS:

(1)

Lead Project Scientist Event Log

Date 9/9/05 Flight 050909A LPS M. Black

Time	Event	Position	Comments
0130	Takeoff	MacDill	~45 minute flight
0137	Radar Tape On over land		
0142	Tail noisy - ground radar interference		
0204	~70 miles SW of eye-		head NE to eye
020630	Drop #1 60 mi SW of		Eye - NO wind
020944	Drop #2	50 mi SW -	no transmit later
021948	Drop #3 SW eyewall		no winds
022350	eye 28.70 79.25		
0225	circle in eye		
022954	eye drop + BT - no data		
	- no launch detect		
0230	Circling in eye again to get a good eye drop		
0235	Someone smells smoke?		
0240	Found problem - launch tube motor		
0253	Still circling		
0300	Started radar.dat		
031024			
0309			
0357			
0357	circling at NW point		Canaveral Buoy

55 kts

30.05 80.73 41012

~20 kts SFMR

30 kts Flt-level

(2)

Lead Project Scientist Event Log

Date 9/9/05 Flight 050909H LPS M. Black

H. Ophelia

Time	Event	Position	Comments 25 k
040417	Drop#6 at Buoy 42014		30 kts sfc — no thermal run
040430	AXBT #3	27.1°C – long time	
040539	Drop #7	Backup	– good sonde
042412	NW Eyewall	Drop 8 –	no winds
043050	Eye 28°.76'	79°.31'	Drop #9
043423	SE eyewall	BT #4 – Bay	
		–55 kt/SFC, 50 kt-SFMR	
045900	105 mi	SE, turn to North	
053245	105 mi	NE turn to SW	
053920	Drop #11	60 mi NE	– no winds
054816	Drop #12	NE eyewall	– no
055927	Drop #13	eye	
060316	Drop #14	SW eyewall	
061859	~70 mi SW of eye	near coast	– hdg E
061939	Drop #15	– no winds except on Chassis 2	
0617 –	0638	Radar Down	
06	SW		
07			
0716	~40 miles	SE of eye	hdg to eye
073219	29°.02	79.29' eye	– no launch detect

0746 eye 29°N 79°17' Drop 17

0748 Radar down, W of eye – SFMR leg at 10 KFt

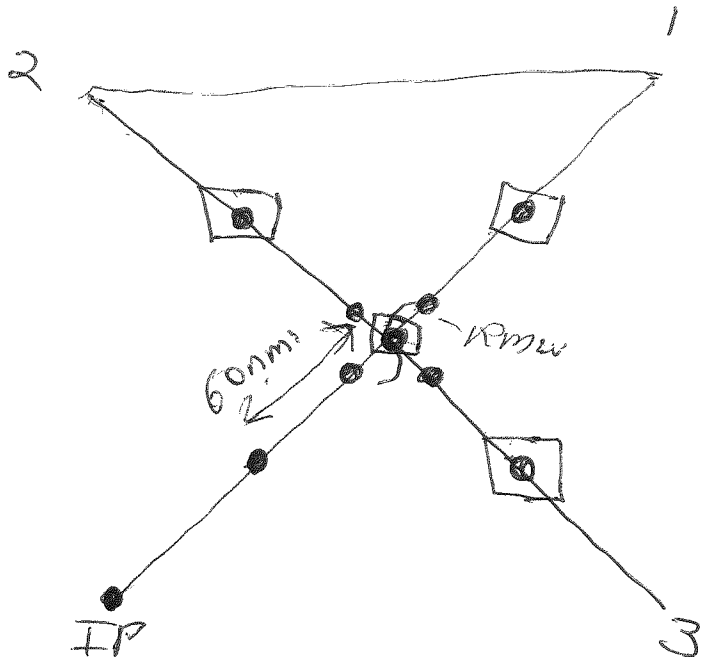
080130 – At Buoy

0811 – Hdg to Macdill

0813 – Radar Off

050909 H

Sondes + BTs



• sonde

□ BT

Rmw, eye sondes - AOC

IP, 60nm from ctr - HRD

plus any for P. Chang