

Lead Project Scientist

Flight ID 080831H
PreflightStorm GurtavLPS Aberson

- _____ 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 from 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 Gustav Experiment name Oceanwinds
 Date 080831 Aircraft N42RF Flight ID 080831h

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Abrson</u>	Flight Director	<u>Damiano</u>
Radar	<u>Armano / Lorusolo</u>	Pilots	<u>Chen, Drummond, Jaggart</u>
Workstation	<u>Armano / Lorusolo</u>	Navigator	<u>Seegal</u>
Cloud Physics	<u>—</u>	Systems Engineer	<u>Port</u>
Photographer/Observer	<u>—</u>	Data Technician	<u>Shane, Mattson</u>
/Guests	<u>—</u>	Electronics Technician	<u>Hardy, Barker, Roney</u>
Dropwindsonde	<u>Armano / Lorusolo</u>	Other	<u>Chen, Zdanek, Chen, M. Martin</u>
AXBT/AXCP	<u>Abrson</u>		

B. Take-off and Landing Times and Locations:

Take-Off: 1921 UTC Location: Mach 10

Landing: 0349 UTC Location: Mach 10

Number of Eye Penetrations: 7

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
173710 AF	25 49	86 34	960 mb	93kt sfc, 105kt FL
191650 AF	26 04	86 56	957 mb	74kt sfc, 103kt FL 307/14
20258 NOAA	26 18	87 11	955 mb extrap	95kt sfc, 98kt FL
205440 AF	26 19	87 13	956 mb	77kt sfc, 105kt FL 315/14
2226 NOAA	26 35	87 24	953 extrap, 954 sonde	101kt sfc, 111kt FL
2303 AF	26 43	87 39	953 mb	81kt sfc, 97kt FL
2327 NOAA	26 46	87 37	952 mb extrap	101kt sfc, 110kt FL

D. Mission Briefing:

Figure 4 from SE, then ocean winds
 BTs/drops at ends of Figure 4 and in eye. BTs along SE to NW leg at midpoints
 purpose has double eyewall structure

Lead Project Scientist Event Log

Date 080831 Flight 080831I LPS Aberson

Time	Event	Position	Comments
1921	Takeoff	MacDill	
	Continuity on clo	BTS lost on takeoff	17 ² remaining
1935	Through first outer band		
2030	Turn in bound	Sonde #1 BT #1	good, see sheet
2041		BT #2	good
2051		BT #3	no data
205438		Sonde #2 SE eyewall	
2101		BT #4	good flat pressure in eye
210220		Sonde #3 NW eyewall	95kt SFMR, 98kt FL
211114		BT #5	good
		TA out	did not know how to fix, so out for awhile
2116	turn to downwind leg		
212357		Sonde #4 BT #6	
2131	radar back up	Both TA & LF were out	
2156	turn NE in bound		
215713	SW 105 nm	Sonde #5 BT #7	
2212	Secondary wind max	FL, leveling off	2nd on surface
2219	started hunting for eye	Sonde #6 BT #8	SW eyewall Diamond shaped
2226		Sonde #7 BT #9	eye
2233		Sonde #8	NE eyewall
2242	Restart radar	Other wind maximum FL & SFMR	fast fall
2251			
225554	NE 105 nm delay turn for	Sonde #9 BT #10	NE 105 nm
2256	turn right back in bound		
2320		Sonde #10	NE eyewall
2320	hunt for center		
2325	turned back N	26 46 87 31	2327 952 mb 320/15-16
2341	turn right at end of leg		

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

[illegible]

HURRICANE GUSTAV 31AUG2008

