

Flight ID
Preflight

080830 H

Lead Project Scientist

Storm *Gustav*

LPS *Abrson*

- _____ 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 ^{2.5}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 Ocean winds
 Date 00F0830 Aircraft N42RF Flight ID 080F30H

A. Participants: NOAA2 1707A GUSTAV

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Abrson</u>	Flight Director	<u>Damiano</u>
Radar	<u>Giamache / Lorusolo / Amene</u>	Pilots	<u>Grimonte / Choy</u>
Workstation	<u>"</u>	Navigator	<u>Bishop</u>
Cloud Physics	<u>—</u>	Systems Engineer	<u>Wade</u>
Photographer/Observer	<u>—</u>	Data Technician	<u>Bart, Greene, ^{Olney} Bosko</u>
/Guests	<u>—</u>	Electronics Technician	<u>Peck</u>
Dropwindsonde	<u>—</u>	Other	<u>Zolensk, Chu, Manuel, Taggart</u>
AXBT/AXCP			

B. Take-off and Landing Times and Locations:

Take-Off: 2018 UTC Location: MacDill

Landing: 0153 UTC Location: MacDill

Number of Eye Penetrations: 3

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind	
30/182800 AF	<u>21° 41'</u>	<u>82° 39'</u>	<u>943 mb</u>	<u>140 kt FL, 98 kt SFC</u>	<u>motion</u>
30/200840 AF	<u>22° 01'</u>	<u>82° 51'</u>	<u>942 mb</u>	<u>143 kt FL, 83 kt SFC</u>	<u>312°/14 kt</u>
30/2154Z AF	<u>22° 21'</u>	<u>83° 05'</u>	<u>942 mb extrap.</u>	<u>941 mb drop</u>	<u>328°/12 kt</u>
30/2148Z NOAA	<u>22° 19'</u>	<u>83° 05'</u>	<u>936 mb extrap.</u>		
30/2256Z NOAA	<u>22° 29'</u>	<u>83° 16'</u>	<u>none / over land</u>	<u>125 kt FL</u>	<u>320°/14 kt</u>
30/2344Z AF	<u>22° 37'</u>	<u>83° 25'</u>	<u>952 mb</u>		

D. Mission Briefing: Figure 4, then Ocean winds
 30/0029Z NOAA 22° 43' 83° 32'

2138 22° 21' 83° 03'
2318 22° 41' 83° 15'

320°/14 kt

5- map, FL, sfpr

7- SFMR

13-15 radar

10-12 display

Lead Project Scientist Event Log

Date 080830

Flight 080830 H

LPS Aberson

fix
200840
20° 01'
82° 51'
83kt
942mb
143kt
outbound

Time	Event	Position	Comments
201800	Takeoff	McDill	slight delay due to thunderstorm
2021	Overflying around thunderstorm. Radar off		
2036	Through first heavy band. radar has been on		
2102	Another outer band		
	IP 21° 03' 83° 32'		
	Current plan	180° 90 nm leg inbound	
		200° 105 nm leg outbound	
		310° 90 nm leg inbound	
		290° 90 nm leg outbound	
2119	Sonde #1		
2143	eyeball passage		~80C stadium effect
2150	eyeball passage	Sonde #2	eye T almost 22°C 85kt SFMR inbound
			~136 kt inbound, 100 kt outbound
2208	descending to 8000ft to descend with AF, turn	Sonde #3	
2233	Sonde #4 turn inbound		
2241	Sonde #5 shallow water	~25ms ⁻¹	SFMR
			Wedge in LF, except over land or when re booting
2244	track 300°		
2247	climb to 12000ft		
2248	Sonde #6 shallow water	~30ms ⁻¹	SFMR
2250	track 280°		
2251	Sonde #7	eyeball really over land. No data	
2258	eyeball	~80C	ice lightning
2312	Sonde #8 turn upward to start reentry pattern		
2336	descent to 10000, outside turn south bound		
2350	turn outbound to wait for eyeball to come off shore		
0003	back inbound		

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

[illegible]