Lead Project Scientist

Storm or Project AL92 **Experiment name** Genesis / Ocean Winds
Flight ID 100912I1 **Mission ID** WXWXA 9212

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.

Lead Project Scientist Check List

Storm or Project AL92 **Experiment name** Genesis/Ocean Winds

Flight ID 100912I1 **Mission ID** _____

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Rogers	Flight Director	Damiano
Radar/Workstation		Pilots	
			Giaimonte
	Murillo	Navigator	Bishop
Cloud Physics		Systems Engineer	Naeher
Photographer/Observer /Guests		Data Technician	Dan Sinci
Dropwindsonde	Flotz	Electronics Technician	Peek
AXBT/AXCP		Other	

B. Take-off and Landing Times and Locations:

Take-Off: 2004 UTC Location: MacDill

Landing: _____ UTC Location: St. Croix

Number of Eye Penetrations: —

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing: Conduct a genesis mission into AL92. Take-off KMCF, fly to system in central Caribbean. Fly a butterfly pattern, IP on NW side, end up on NE side. Leg lengths 90 nm, System shows signs of circulation, possibly in mid levels, with intermittent periods of deep convection. Current has a line of showers oriented NE/SW along the NW edge of the circulation center. Fly each pattern at 10,000 ft, radar. Drop sondes at turn points, and 1/3 points on eagle leg. Midway through second leg "penetration" switch to sector mode for Ocean winds.

13/12 16.5 76.0
14/00 17 78.3

Lead Project Scientist Event Log

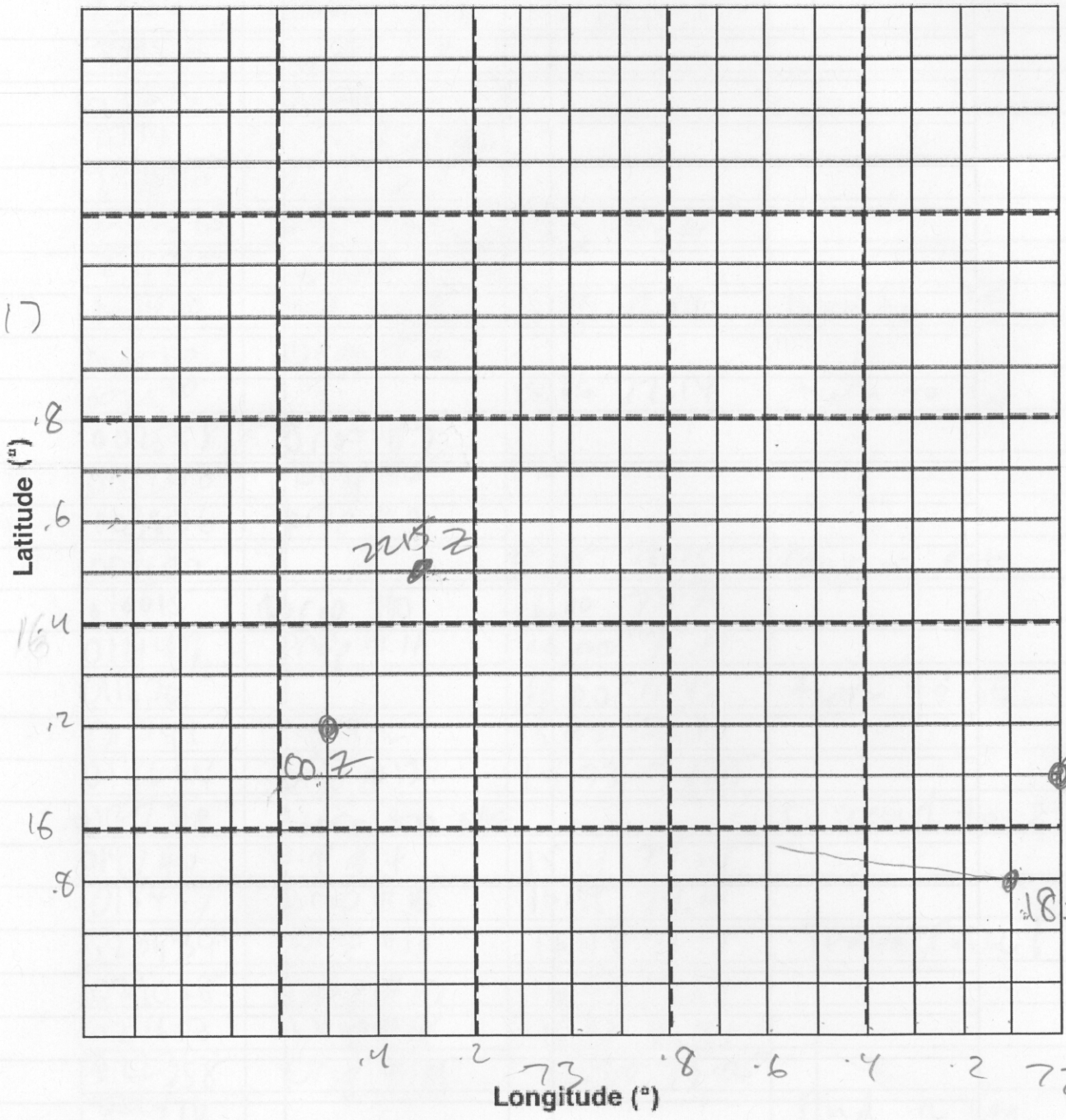
Date 100912 **Flight ID** 100912I1 **LPS** Eric Uhlhorn

Time	Event	Position	Comments
2309	Descend to 10K'	NW of center	
232210	Drop #1 / IP		
232935	Drop #2		
2333	Conv. Band NE/SW		
233650	Drop #3		
235015	Drop #4	SE of "center"	
235727	Drop #5		
000400	End leg 1	14.79 72.84	turn to NE
000510	Drop #6		
002510		16.16 72.14	turn to W
002558	Drop #7		
003240	Drop #8		
003836	Drop #9		
005100		15.95 73.75	center est
010615	Drop #10	16.00 74.70	
011147	Drop #11	16.00 75.13	
011570		16.00 75.42	turn to SE
011641	Drop #12	15.92 75.40	
013604	Drop #13	14.73 74.65	
013730	turn to NE		Descend to 8500'
014740	Drop #14	15.14 74.34	
015437	Drop #15	15.55 74.10	
020934	Drop #16	16.44 73.57	FAST FALL!
021028	Drop #17	16.50 73.54	
021658	Drop #18	16.88 73.31	
022358	Drop #19	17.30 73.05	
022410			End of leg

0136
0159

Observer's Flight Track Worksheet

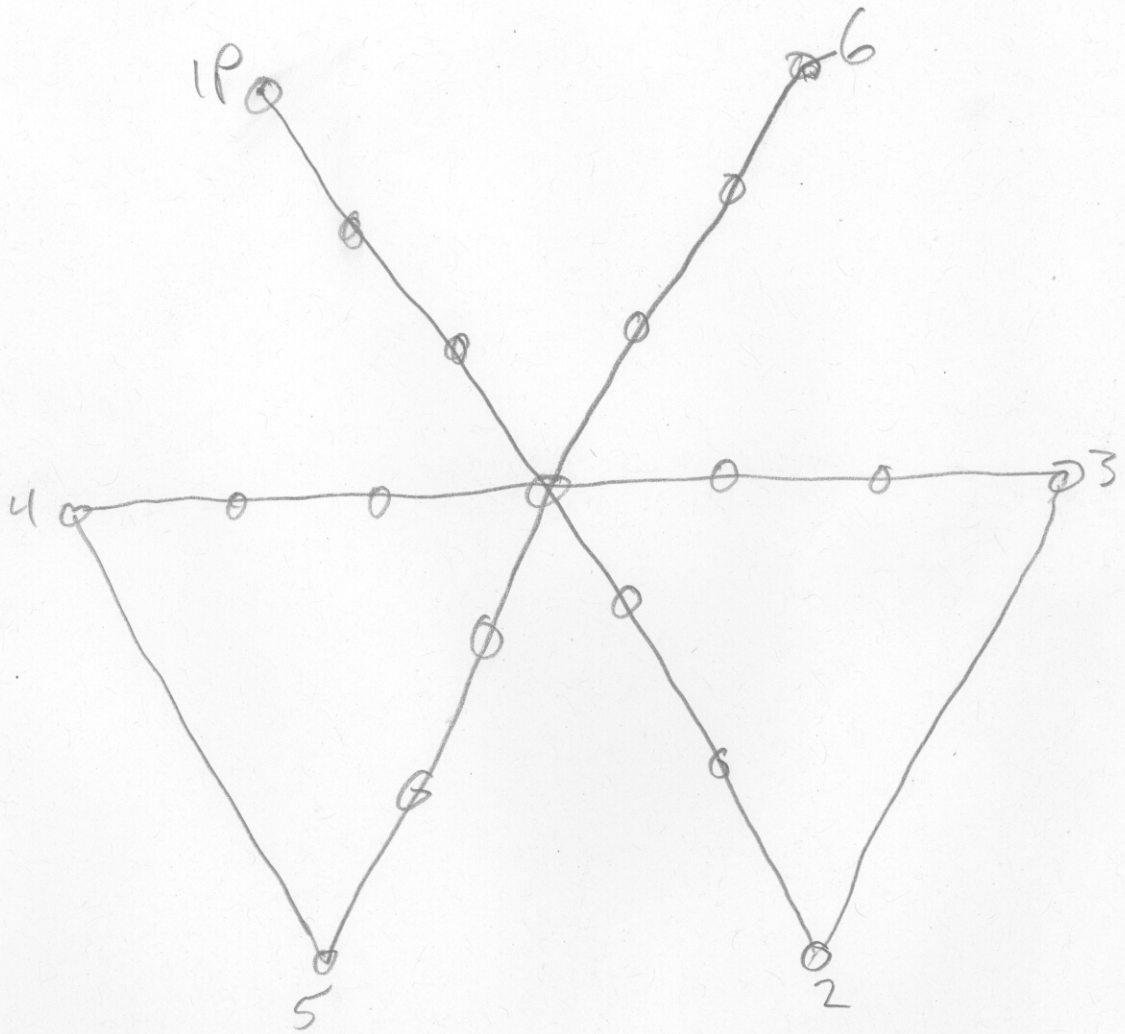
Date _____ Flight _____ Observer _____



15.8	72.1	18 Z
16.2	73.5	00 Z

2215	16.5	73.3
1715	15.1	72.0

Proposed flight track for 100912I



0 - drop points