Lead Project Scientist

Storm or Project AL92 **Experiment name** Genesis / Ocean Winds
Flight ID 100913I1 **Mission ID** WXWXA 92L5

Preflight

SM 1. Participate in general mission briefing. 215808

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

SM 3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.

SM 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.

SM 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.

SM 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.

SM 7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.

SM 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.

SM 9. Make sure each HRD flight crew member has a life vest.

SM 10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

In-Flight

SM 1. Confirm from AOC flight director that satellite data link is operative (information).

SM 2. ~~Confirm camera mode of operation.~~

SM 3. Confirm data recording rate.

SM 4. Complete Lead Project Scientist Form.

SM 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

SM 1. Debrief scientific crew.

SM 2. Gather completed forms for mission and turn in to data manager at HRD.

SM 3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.

SM 4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.

SM 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.]

SM 6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to MGOC.

SM 7. Determine next mission status, if any, and brief crews as necessary.

SM 8. Notify MGOC as to where you can be contacted and arrange for any further coordination required.

SM 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 100913I1 **Mission ID** WXWXA 9225

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Shirley Murillo	Flight Director	A. Barry Damiano
Radar/Workstation	Brad Klotz → Eric Uhlhorn	Pilots	Al Giramonte, Kathy Martin, Mark Sweeny
Ocean Winds	Paul Chang	Navigator	Joe Bishop
~~Cloud Physics~~	Zorana Jelenak	Systems Engineer	Dewie Floyd, Ken Heyst
~~Photographer/Observer/Guests~~	Jason Dworsky	Data Technician	Dana Naeher
Dropwindsonde operator	Charles Lynch	Electronics Technician	Bobby Peek
~~AXBT/AXCP~~		Other	

B. Take-off and Landing Times and Locations:

Take-Off: 215808 UTC Location: STX (St. Croix)

Landing: 054526 UTC Location: STX (St. Croix)

Number of Eye Penetrations: ——

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
100914 / 0000Z	16.5 N	80.6 W	——	——

D. Mission Briefing:

The plan is to fly PGI44L / AL92. We want to capture pre-genesis. Being that the system is SW of Jamica we are planning for an ~9hr flight. We will fly a single figure for pattern. The 1st pass into the storm will be @ 12,000 ft (radar) then we will descend to 7,000 ft (radar) for the Ocean Winds portion of the experiement.

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

Flight ID 100913I1 **Mission ID** WXWXA 9215

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:

16.9 79.24 054826

Lead Project Scientist Event Log

Date 100913 **Flight ID** 100913I1 **LPS** Shirley Murillo

Time	Event	Position	Comments
215108	took off		from St. Croix (STX)
005026	drop #1	16° 6" 78° 9" W	dropped 2 min prior to IP/turn
005245	turning 270°	16° 0.4 78° 8"	turn @ IP
010106	drop #2	16° 0" 78° 46"	
011110		16.9 78. 24	@ center of flight pattern
011818	drop #3	16.0' 80° 5'	
012458	drop #4	16. 0° 80° 35'	near turn point west
012738	275@4kts?	15°56 80°44'	turning 135°
			winds are barely 10kts at flight lv
014952	drop #5	14°50' 79°25'	at point 4 of track.
015210			turning towards N.
015410			@ 7000 ft
020331	drop #6	15°21' 79°24'	mid point
022203	drop #7	16°36' 79°24"	mid point
022954	drop #8	17° 9' 79° 24	endpoint
023112		17°14' 79°23	turning
054526			landed in St. Croix

Mission Summary

Storm name

YYMMDDA# Aircraft 43RF

100913I1

HRD Scientific Crew (43RF)

Lead Project Scientist Shirley Murillo

Radar Scientist Brad Klotz

Cloud Physics Scientist CCN center - Shirley Murillo

Dropwindsonde Scientist Eric Uhlhorn

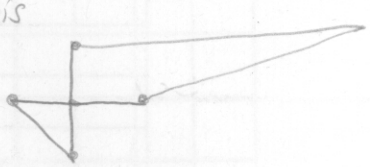
Boundary-Layer Scientist

Workstation Scientist Eric Uhlhorn

Observers

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

Single figure four pattern into AL92/PGI44L to capture pre-genesis
We will start at 12,000ft (radar) for the first half of
the pattern then descend to 7,000ft (radar) for the Ocean Winds
experiment.



Mission Synopsis: (include plot of actual flight track)

We reached the IP and headed to the south, then to the NW, west and then back to St. Croix.

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

We sampled AL92L and followed the pattern. There were very little scatters but we still sent out the radar analyses.

Problems:(list all problems)

Most problems occured before taking-off. There was an electrical fire at the avaps station which delayed take-off. The pilots had difficulty getting flight clearance. Then a Cessna "blocked" us in so we couldn't move until the aircraft was moved. Our take-off was delayed about 2 hours.

Expendables used in mission:

GPS sondes : 8

AXBTs : ——

Sonobuoys: ——