

## Lead Project Scientist

Date 10/5/20

Flight ID 201005D1

Storm or Project TS Delta

Experiment name NHC Fix

Mission ID

### Pre-flight

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 Field Program Director.
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 Field Program Director
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify Field Program Director 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 *Delta*

Experiment name *NHC Ex*

Flight ID *201005I1*

Mission ID

**A. Participants:** *f*

Function	Participant	Function	Participant
Lead Project Scientist	<i>Rogers, Dunion</i>	Flight Director	<i>Lundy</i>
Radar	<i>Rogers</i>	Pilot	<i>Rossi</i>
Workstation	<i>Rogers</i>	Pilot	<i>Doremus</i>
Cloud Physics	<i>Rogers</i>	Navigator	<i>Freeman</i>
Drosonde	<i>Rogers, Dunion</i>	Systems Engineer	
Drosonde		Data Technician	<i>Richards, McAlister</i>
AXBT/AXCP		Electronics Technicians	
Observer/Guest			
Observer/Guest		Flight Engineer	

**B. Take-off and Landing Times and Locations:**

Take-Off: \_\_\_\_\_ UTC Location: \_\_\_\_\_

Landing: \_\_\_\_\_ UTC Location: \_\_\_\_\_

Number of Eye Penetrations: \_\_\_\_\_

**C. Past and Forecast Storm Locations:**

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
/				
/				
/				
/				
/				

**D. Mission Briefing:**

Lead Project Scientist Event

Date

Flight ID

LPS Rogers, Durim

Time	Event	Position	Comments
1658	takeoff		
1734	drop 1	off SW FL coast	
1756	drop 2	N of Cuba	
1844	drop 3	S of Cuba, 19°5'80"49'	
1907	pattern, drop 4	at IP, 105 nm NW of center	
1921	drop 5	midpt drop 16 49 80 05	
1925	obs	strat ahead, some 6-8 km echo tops to <del>east</del> flight of plane	
1940	drop 6, center	center 16°8'79'14'	
1956	drop 7	midpt SE 15°26'78°32'	
2009	drop 8	endpt SE 14°56'77°53'	
2036	drop 9	top of spiral	16°2'78°6'
2049	obs	downwind leg	radar analysis, 3 form first pass shows shallow water, 65 m winds at 1 km altitude, but then drops off quickly above that
2104	drop 10	endpt NE	
2116	drop 11	midpt NE 16°4'78°56'	
2122	drop 12	RMW NE 16°27'79°13'	FL ~30 m/s
2125	drop 13, center	center 16°5'79°9'	
2131	drop 14	RMW SW 16°10'79°23'	FL 28 m/s
2145	drop 15	midpt SW 15°29'80°06'	
2155	drop 16	endpt SW 14°59', 80°38'	

