

Flight ID 20121028H1 Lead Project Scientist Storm Sandy LPS Mark S  
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.
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 HFP Director.
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 member has a life vest.
7. 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.
2. Confirm camera mode of operation.
3. Confirm radar recording set-up.
4. Confirm data recording rate.
5. Complete Lead Project Scientist Form.
6. 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 bag separately from other missions. Turn in to data manager at HRD.
5. Copy serial flight data, dropsonde files, and radar data onto thumb drive. Turn in with completed forms.
6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to HFP Director.
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify HFP 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 Sandy Experiment name IFEX  
 Date 28 Oct 2012 Aircraft 42RF Flight ID 20121028H1  
 Mission ID 1918A

**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Marks</u>	Flight Director	<u>Henning/Damiano</u>
Radar	<u>Bucci</u>	Pilots	<u>Halverson/Price/Kidd</u>
Dropwindsonde	<u>Sellwood</u>	Navigator	<u>Kibbey/Kidd</u>
Sea-Air		Systems Engineer	<u>Heystake</u>
Photographer/Observer/ Guests (give affiliation)	<u>S. MacDonald (AE)</u> <u>C. McLean (OAR)</u>	Data Technician	<u>Lynch/Richards</u> <u>Basco</u>
Cloud Physics		Electronics Technician	<u>Darby</u>
		Other ( )	

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

Take-Off: 0758 UTC Location: Mac Dill AFB  
 Landing: 1507 UTC Location: Mac Dill AFB

Number of Eye Penetrations: 3

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

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>1003</u>	<u>31.8</u>	<u>73.5</u>	<u>957</u>	
<u>1123</u>	<u>31.9</u>	<u>73.25</u>	<u>956</u>	
<u>1243</u>	<u>31.95</u>	<u>73.00</u>	<u>955</u>	

E. — Equipment Status (Up ↑, Down ↓, Not Available —, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	Number of Expendables
Radar/LF	↑	↑	↑	
Doppler Radar/TA	↑			
Cloud Physics	↑			
Data System	↑			
GPS sondes	↑			16/1 bad
AXBT/AXCP	↑			18/6 bad
Ozone instrument	—	—	—	
Cameras	↑	↑	↑	
Other ( )				

D. Mission Briefing:

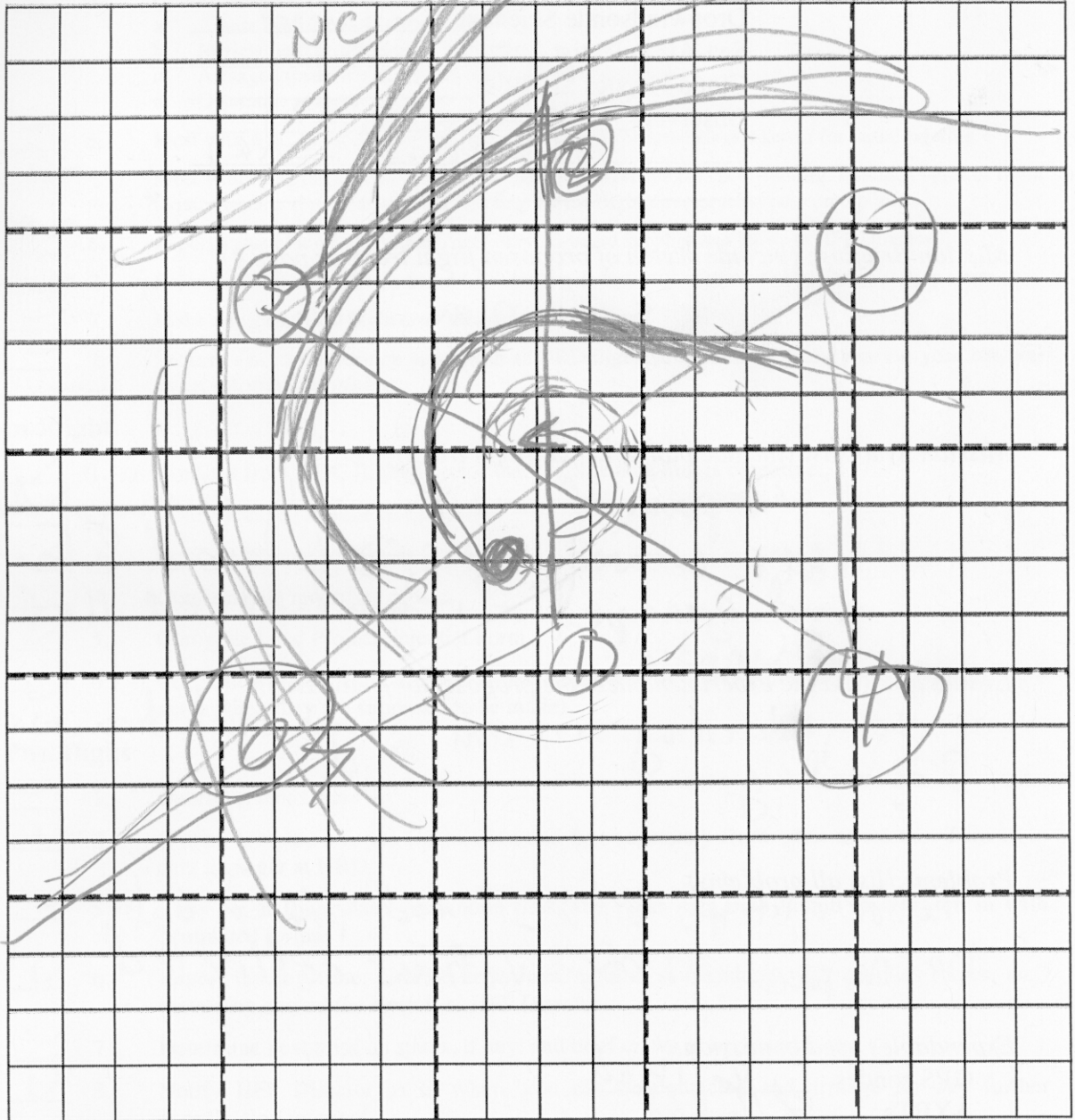
See attached Flight plan

- Butterfly 3 legs 100nm<sup>legs</sup> SW with 20nm extensions on N and NW side
- 12000 ft. (watch for ice — descend to 8K ft)
- Combo drop/AXBT end points, mid point and 1st and 3rd eye drops
- 3 eye drops
- IWRAP working



# Observer's Flight Track Worksheet

Date \_\_\_\_\_ Flight \_\_\_\_\_ Observer \_\_\_\_\_



Latitude (°)

Longitude (°)

## Mission Summary

### Storm name

YYMMDDA# Aircraft 42RF

20121028H1

Scientific Crew (4RF)

Lead Project Scientist Marky

Radar Scientist Bucci

Dropwindsonde Scientist Sellwood

Sea-Air Scientist —

Cloud Physics Scientist —

Observers McLean (OAR)

MacDonald (OAR)

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

see plan

*Mission Synopsis: (include plot of actual flight track)*

as planned with only change descent to 11kft between pt 253 to avoid electrification and graupel - remained at 11kft rest of flight.

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

very interesting mission - eye evolution was fascinating

*Problems: (list all problems)*

minor glitches with LF and power but no impact on observations collected

*Expendables used in mission:*

GPS sondes: 16/1 bad

AXBTs: 18/6 bad

Sonobuoys: —

Radar analyses 3