

## Lead Project Scientist

Storm or Project Karl Experiment name RAPX  
Flight ID 20160921T1 Mission ID WLR2A KARL

### 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 KAM Experiment name RAPX

Flight ID 201609211 Mission ID W41ZA/KARU

**A. Participants:**

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Jun Zhang</u>	Flight Director	<u>Rick Henning</u>
Radar/Workstation	<u>Paul Reaser</u>	Pilots	<u>Chris Keras</u>
		Navigator	<u>Pete Freeman</u>
Cloud Physics		Systems Engineer	
		Data Technician	<u>Mascaro</u>
Dropwindsonde	<u>Britney Dahl</u>	Electronics Technician	
AXBT/AXCP		Other	
Photographer/Observer			
s/Guests			

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

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

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

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

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

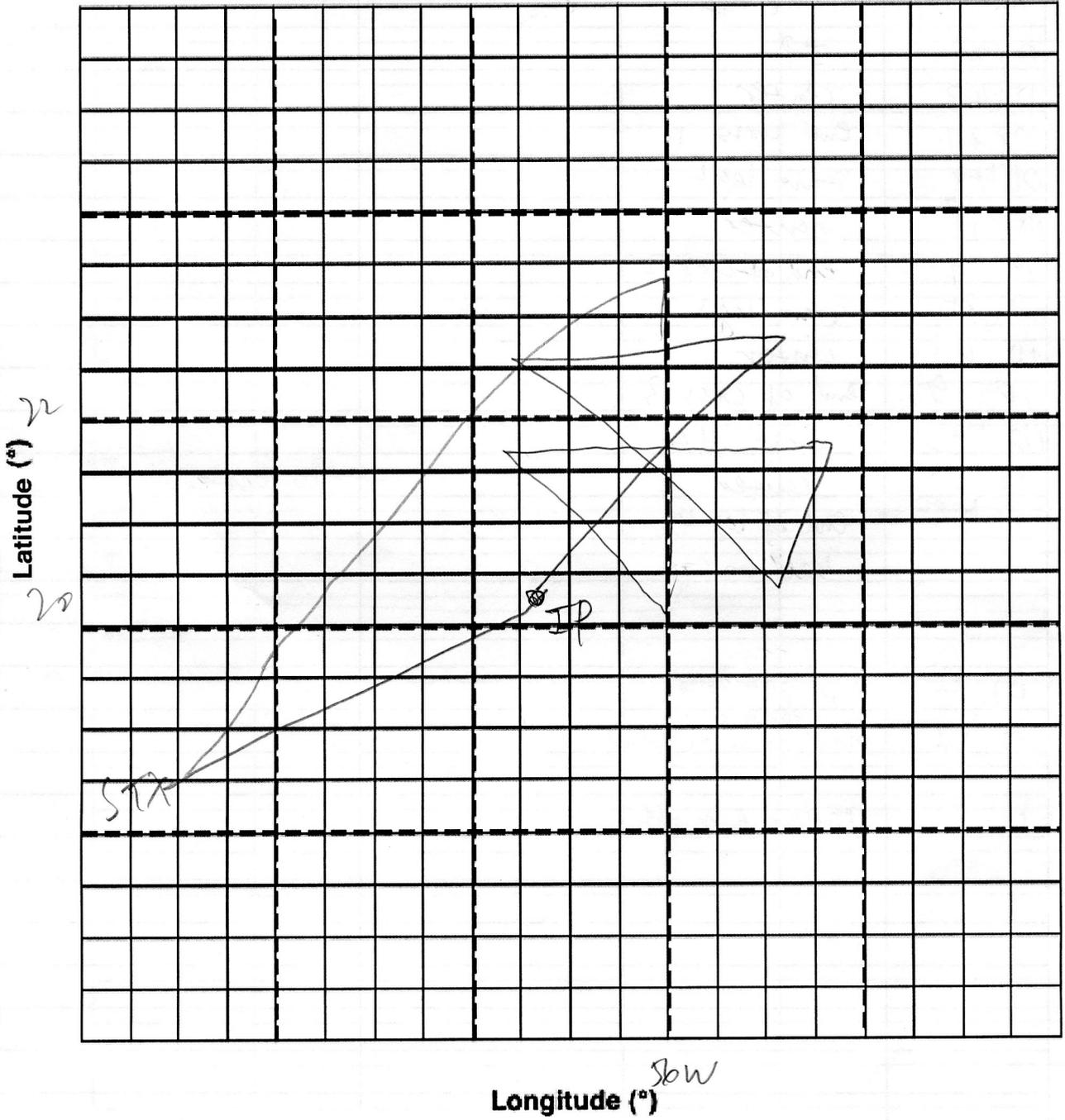
Date/Time	Latitude	Longitude	MSLP	Maximum Wind

**D. Mission Briefing:**



# Observer's Flight Track Worksheet

Date 2016 09 21 Flight \_\_\_\_\_ Observer \_\_\_\_\_



## Mission Summary

### Storm name

YYMMDDA# Aircraft 4\_RF

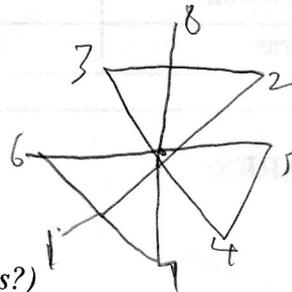
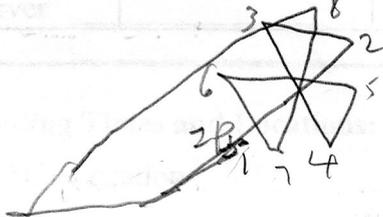
### Scientific Crew (4 RF)

Lead Project Scientist Jun Zhang  
Radar Scientist Paul Pearson  
Cloud Physics Scientist Brian Dahl  
Dropwindsonde Scientist ?  
Boundary-Layer Scientist \_\_\_\_\_  
Workstation Scientist \_\_\_\_\_  
Observers (affiliation) \_\_\_\_\_

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

Rotated Figure 4  
4 passes, may extend southeast leg, 90 nm per leg.

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



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

Did not extend the southeast leg, because the convective feature was too far away from the prepared center

*Problems: (list all problems)*

none

*Expendables used in mission:*

GPS sondes : \_\_\_\_\_

AXBTs : \_\_\_\_\_

Sonobuoys: \_\_\_\_\_