Lead Project Scientist

Flight ID 20120826H1 **Storm** ISAAC **LPS** JASON DUNION

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 Isaac **Experiment name** TDR
Date 26 Aug 2012 **Aircraft** N42 **Flight ID** 20120826H1
Mission ID 2309A

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Dunion	Flight Director	Williams
Radar	Reasor	Pilots	Kibbey Halverson
Dropwindsonde	Bucci	Navigator	Brakob
Sea-Air		Systems Engineer	
			Lynch
Photographer/Observer/ Guests (give affiliation)		Data Technician	
			Paul
Cloud Physics		Electronics Technician	
		Other ( )	

B. Take-off and Landing Times and Locations:

Take-Off: 2005z UTC Location: MacDill

Landing: 0246 UTC Location: JAX

Number of Eye Penetrations: 5

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
1800Z	23.9N	81.5W	994	60mph
42 CTR				

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				
AXBT/AXCP				
Ozone instrument				
Cameras				
Other ( )				

D. Mission Briefing:

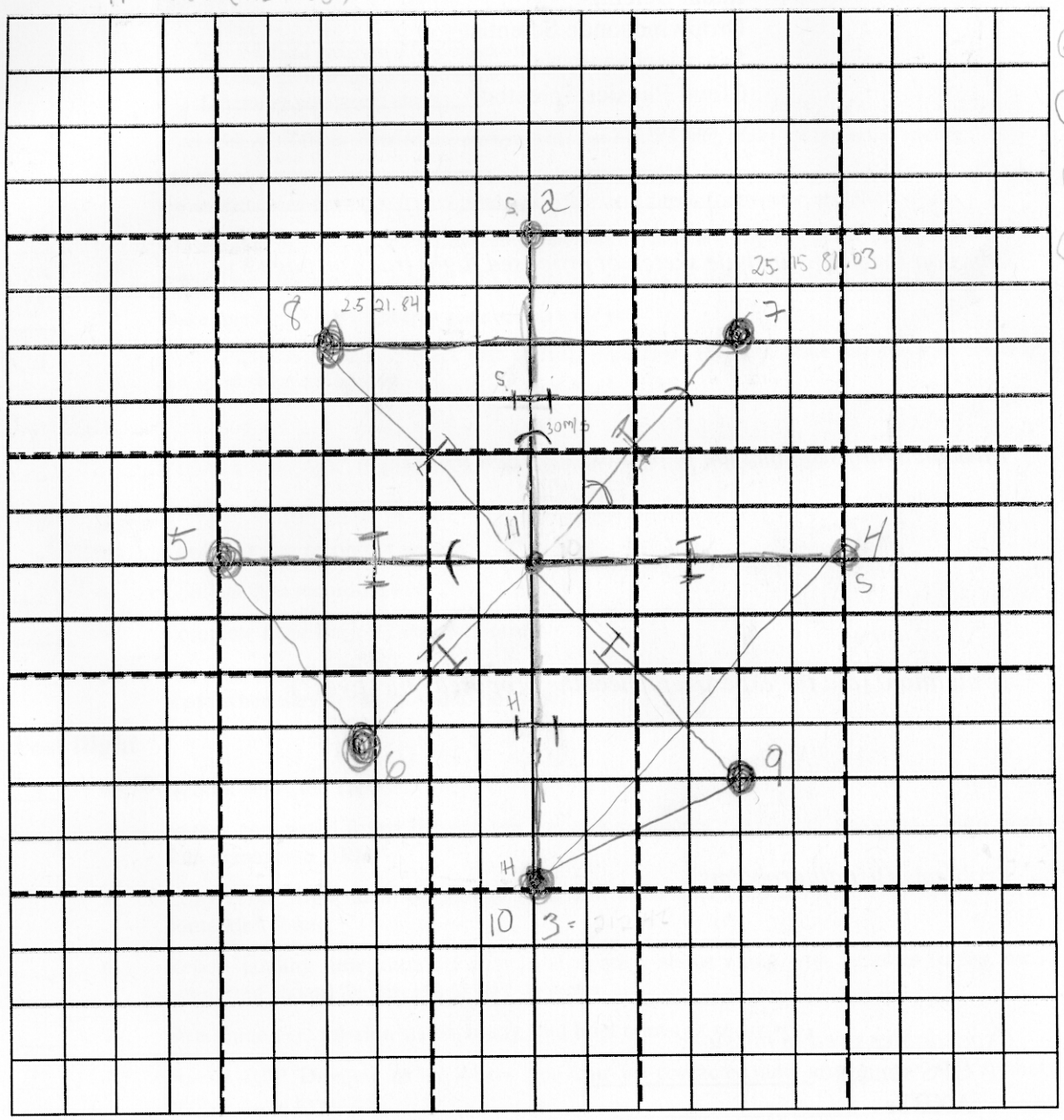
- TDR: trouble bringing up ... online at 2035Z before 1st pt.
- 1st center: data system froze → missed
- radar task settings were incorrect → corrected just before pt 4 (good after that
  ↳ pt 4-5 = 1st doppler analysis
- shifted pattern after pt. 9 to make up for missing radar on init. N-S run
  ↳ pt 9 → 105nm S (pt 10) → ctr → FP (pt 11)

Observer's Flight Track Worksheet

Date _____ Flight _____ Observer _____

S = AXBT (Sippican) H mid pt initial ctr: 25.0 82.7W

H = AXBT (HERMES) ⌒ RMW IP → drop 2035z 26.7 82.7W



AXBTs

(2) 28.8C

(2A) 28.8C

(C) NA

(2B) 28.6C

(3)

Latitude (°)

Longitude (°)

IP 2035z 26.7 82.7

3 2124z (storm = 295/15)

4 2148z

7 2335

8

9