Lead Project Scientist

Storm or Project Tomas **Experiment name** TDR
Flight ID 101106I **Mission ID** 2121A TOMAS

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

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A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Aberson	Flight Director	Damiano
Radar/Workstation		Pilots	Nelson, Sweeney, Aberson
	Gamache	Navigator	Sloan
Cloud Physics	Aikman	Systems Engineer	Hood / Darby
Photographer/Observer /Guests		Data Technician	Noetheri, Smith, Marcano
Dropwindsonde	Vukicevic	Electronics Technician	
AXBT/AXCP		Other	Rottveal

B. Take-off and Landing Times and Locations:

Take-Off: 0805 UTC Location: STX

Landing: _____ UTC Location: MacDill

Number of Eye Penetrations: 4?

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing: TDR mission. Four parts. CCN/aerosol runs on 2 downwind legs. Possible BL work/8-sonde sequence on one inbound leg.

Lead Project Scientist Event Log

Date 6 Nov 2010 **Flight ID** 101106I **LPS** Aberson

Time	Event	Position	Comments
0805	Takeoff	STX	
0915	Begin descent to	IP	
0924	Turn & drop 1; just	outside convective band	lightning, strong band
0927	diverting around cell		
0940	40-nm-wide partial	ring on LF	
0943	center drop for qlty	2208 71 10	drop 2
1007	turn and drop		drop 3
1027	inbound turn		drop 4
1038	mid point drop	just off Caicos	drop 5
1050	marked center, no drop	Stronger convection	NAS & center, open W
1100	mid point drop inside	very strong band	drop 6 22 22 71 01
1111	end point drop spiral	to 2000 ft	drop 7
1123	climb to 3K near cell		
1130	climb to 3.5K		
1135	began ascent to 5K		
1139	Turn inbound at 5K		drop 8
1201	center drop 2235	7053	drop 9 fair fall 989.7
1224	turn downbay ascend to 6K ft		drop 10
1229	ascend to 7Kft		
1234	ascend to 8kft		
1239	ascend to 8.5kft		
1244	ascend to 10 kft		
1248	inbound turn and drop		drop 11
1259	mid point		drop 12
	satellite presentation better, less	clear	
	less reflectivity on radar		
	most convection now on S side		
1309	center 2248 7041		drop 13 failed, came back
1321	midpoint		drop 14
1330	last drop		drop 15