

050629 H Test Flight

## Lead Project Scientist

### Preflight

- ☐ 1. Participate in general mission briefing.
- ☐ 2. Determine specific mission and flight requirements for assigned aircraft.
- ☐ 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.
- ☒ 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 appropriate HRD operations center (MGOC in Miami).
- ☒ 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 members have life vests
- ☒ 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.
- ☐ 8. Collect "~~mess~~" fee (\$2.00) from all on-board HRD flight crew members.

### 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. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- ☐ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- ☐ 4. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ☐ 5. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- ☐ 6. Obtain a copy of the all VHS videos from aircraft cameras (3-4 approx.). Turn in with completed forms.
- ☐ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.
- ☐ 8. Determine next mission status, if any, and brief crews as necessary.
- ☐ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- ☐ 10. Prepare written mission summary using Mission Summary form (due to Field Program Director a week after the flight).

### Lead Project Scientist Check List

Storm or Project Test Flight Experiment name \_\_\_\_\_  
 Date 6/29/05 Aircraft 42 Flight ID 0506297

#### A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Paul K. Herby</u>
Radar	<u>M. Black</u>	Pilots	<u>Randy Tolesky</u> <u>Phil Kennedy</u>
Workstation	_____	Navigator	<u>Tim Galt</u>
Cloud Physics	_____	Systems Engineer	<u>Sean McWilliam</u>
Photographer/Observer	_____	Data Technician	_____
/Guests	_____	Electronics Technician	_____
Dropwindsonde	<u>Krystal Voldo</u>	Other	_____
AXBT/AXCP	_____		

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

Take-Off: 1314 UTC Location: MacDell

Landing: 1437 UTC Location: \_\_\_\_\_

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

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

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

#### D. Mission Briefing:

Buoy 6218  
20,000, 10,000, 5,000, 1,000 ft  
intercomparison w/43



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

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / Cds /Expendables/ Printouts
Radar/LF				
Doppler Radar/TA				
Cloud Physics				
Data System				
GPS sondes				
AXBT/AXCP				
Ozone instrument				
Workstation				
Videography				

REMARKS:

1330 LF very low dBZ

TA probably too low as well

1334 LF Rptd — not one sweep only

1337-38 TA looks ok near cell

134338 Dropsonde - 042715127

no launch detect on HAPS

will need to re-transmit

Ozone 38-39 PAR

1343-<sup>20</sup>~~15~~KFT  
w/143

1344

1406-15~~KFT~~

1344 - LF radar OK

1402 Radar Down for Connection string

143455 - at Buoy

143525 - descend to '5 ft

### Lead Project Scientist Event Log

Date \_\_\_\_\_ Flight \_\_\_\_\_ LPS \_\_\_\_\_

Time	Event	Position	Comments
1508	1,000 RF Bouy		
1509	AXBT at Bouy		
	BT ok SCT 3 - scale on screen wrong		
1531	AXBT 100K's good		
	No network (outside) on workstation		
	Radar seems OK		
	Ozone seems ok		
	No powercord for DAT		
	Need to change AXBT scale on display		
	did not show up on 1-sec screen		
1637	Landan		