Lead Project Scientist 060829H1 T.S. Ernesto

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. None
- ✓ 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 2 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 3.00) 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 form 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 Ernesto **Experiment name** SFMR + Dropwinds
Date 29 Aug 06 **Aircraft** 42 **Flight ID** 060829H1

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Leighton	Flight Director	Mr. Mayeaux
Radar	Leighton	Pilots	T. Story / Giraudo
Workstation	Leighton	Navigator	~~Hilpert~~ J. Bishop / Sieg
Cloud Physics	N/A	Systems Engineer	Klapel
Photographer/Observer /Guests	N/A	Data Technician	S. McMillen
Dropwindsonde	Leighton	Electronics Technician	B. Rook / Olney
AXBT/AXCP	N/A	Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0956 UTC Location: MacDill AFB

Landing: 1902 UTC Location: MacDill AFB

Number of Eye Penetrations: 8

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind

D. Mission Briefing:

SFMR
w/ sonde verification
w/ Doppler processing
w/ Olney wind (component

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	N/A ↓			
Data System	✓ ↑	↑		
GPS sondes	✓ ↑	↑		
AXBT/AXCP	N/A ↓			
Ozone instrument	N/A ↓			
Workstation	✓ ↑	↑		
Videography	✓ ↑	↑		

REMARKS:

CO 100 2234 79.00
11:00 22'43m 79m05

1100Z 79

Lead Project Scientist Event Log

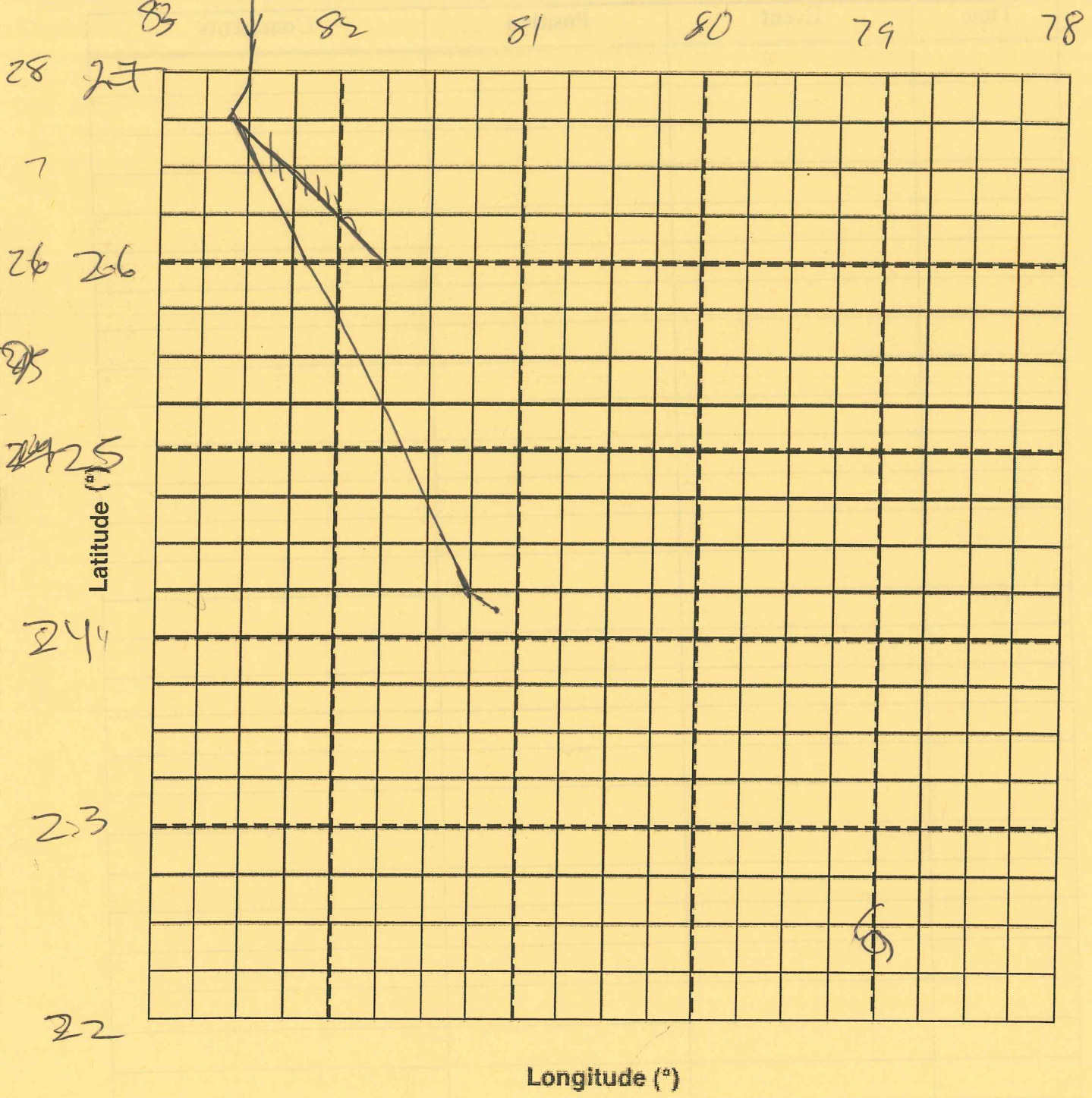
Date 29 Aug 06 **Flight** 060829H1 **LPS** P. Leighton

Time	Event	Position	Comments
09:56:56	Take off	27.85 82.52	27.50 82.32
10:06:00	Radar up and	Recording	FAST Frequency 2100
10:08	Radar up and	Recording	
10:18	Radar beg	Sond & Upsc	
10:30		25.82 82.18	25.86 82.18
11:00			24.4 81.1
11:14			23.42 80.13
11:00 ZFix	teal		2243 79.05
11:54	Turn to North	22.28 77.19	
	fixing	Joe Thornton and Ed Zipser	problems detected.
1430	turn to west	24.10 77.65	
		2329 79.25	
1543	turn to head in to	Nav log	
	See Flight #1	Data	
174530	2358		23.58 79.43
1902:45	LAND	MacDill AFB	

MacDill

Observer's Flight Track Worksheet

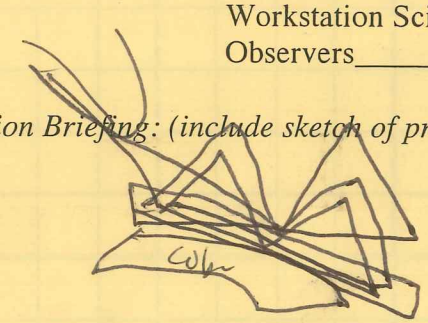
Date 29 Aug 06 Flight 060829H1 Observer Leight



Mission Summary
Storm name
YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)
Lead Project Scientist _____
Radar Scientist_____
Cloud Physics Scientist_____
Dropwindsonde Scientist_____
Boundary-Layer Scientist_____
Workstation Scientist_____
Observers_____

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



Mission Synopsis: (include plot of actual flight track)

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

Problems:(list all problems) Too much work for Jason de Lundle

Expendables used in mission:
GPS sondes : _____ 11 8 transmitted
AXBTs :_____
Sonobuoys: _____