070816H1

Lead Project Scientist

Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft. 12z fix
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. N/A

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. N/A
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).

Rel.

Lead Project Scientist Check List

Storm or Project T.S. Erin **Experiment name** NHC-mandated fix
Date 16Aug07 **Aircraft** N42rf **Flight ID** 0708 16H1

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	Paul Leighton	Flight Director	Tom Shepherd
Radar	"	Pilots	T. Strong / M. Nelson
Workstation	"	Navigator	J. Gallagher
Cloud Physics	"	Systems Engineer	S. Wade / G. Bass
Photographer/Observer /Guests	"	Data Technician	R. Peek / S. Rolles
Dropwindsonde	"	Electronics Technician	W. Ormsby
AXBT/AXCP		Other	

B. Take-off and Landing Times and Locations:

Take-Off: 0941 UTC Location: MacDill AFB Tampa 27° 51.6' 82° 30.5'

Landing: ~~1505~~ 1505 UTC Location: " " " " "

Number of Eye Penetrations: 0

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
16 Aug 07 0941	26.5N	95.7W	WNW @ 12mph	

D. Mission Briefing:

12Z fix with follow-on Beach Patrol.

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	O	O	O	
Data System	↑	↑	↑	1 DAT / 1 printout
GPS sondes	↑	O	O	
AXBT/AXCP	O	O	O	
Ozone instrument	O	O	O	
Workstation	↑	↑	↑	
Videography	↑	↑	↑	

REMARKS:

Mission cancelled en route due to storm already being over land, (~ 1124) while being approx ½ hour or 140 mi short of IP and 270 mi short of storm Center. On Return, in order to burn excess fuel, work completed around buoy at 26°02 N, 85°53'30" W 1 figure 4 at 10,000 ft., 1 fig 4 at 5000 ft with circumnavigation of fixed point at 30° Roll in Clear air and another circle with 15° Roll to be used for calibration of SFMR.

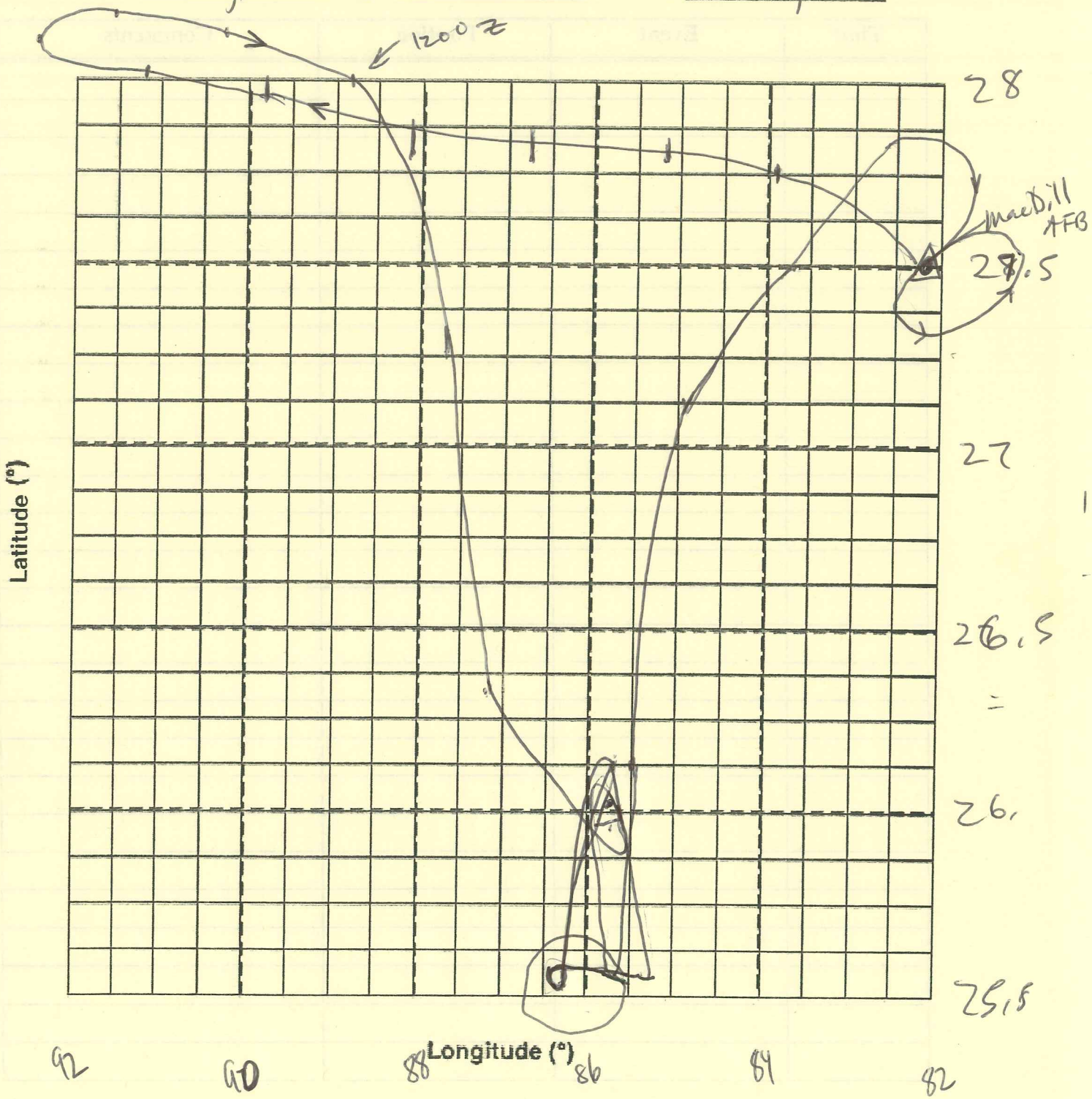
Lead Project Scientist Event Log

Date 16 Aug 87 Flight 070816H1 LPS P. Leighton

Time	Event	Position	Comments
0941	Take off	MacDill AFB	at the 30 min meeting on Runway.
1000	Radar Recording	27 49.6 / 83 54.6	Switch climb to 5000 on
~~1124~~	~~Reverse Course~~	~~27 52.7 / 85 21~~	
1015		27 52.7 85 21	
1030		27 50.4 86 47.1	
1045		27 51.3 88 14.2	
1100		27 57, 89 41.9	
1115		28 2 91 10.4	
1124		28 8.4, 92 2.9	Mission Cancelled
1130		28 12.1 91 32.5	Turn back to EASTBOUND track
1145		28 10.2 90 11.5	
1200		27 59.5 88 51.2	turn to hdg 125°
1215		27 16 87 45.9	start descent to 10000 ft.
1230		26 35.7 86 41.9	level at 10000 ft.
1246		25 53.1 85 38.5	turn to Navaid Buoy hdg 350 at true Nautical 22.5
1251		26 12.4 85 39.4	
1300		25 51.1 86 7.5	
1315		25 55.4 85 47	
1330		26 8.2 85 51	
1345		25 36.4 85 48.5	
1400		26 11.6 85 29.2	
1415		27 13.5 84 56.4	
1430		27 34.8 83 49.0	
1445		27 54.7 82 47.2	
1505			LANDING

Observer's Flight Track Worksheet

Date 16 Aug 07 Flight 070816H1 Observer P. Leighton



Mission Summary

Storm name

YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)

Lead Project Scientist _____

Radar Scientist_____

Cloud Physics Scientist_____

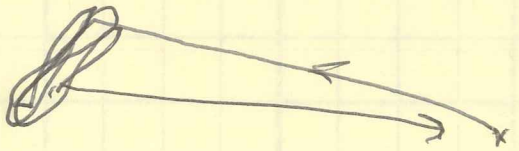
Dropwindsonde Scientist_____

Boundary-Layer Scientist_____

Workstation Scientist_____

Observers_____

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



12Z fix with Beach Patrol after initial PASS

Mission Synopsis: (include plot of actual flight track)

CANCELLED ENROUTE Did Buoy fly over to Sam Sel on Return Flight

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

NO

Problems:(list all problems)

Storm making land fall before plane taking off. from 3 hours away!

Expendables used in mission:

GPS sondes : ~~_____~~ 0

AXBTs :~~_____~~ 0

Sonobuoys: ~~_____~~ 0