

050710T

Lead Project Scientist

Dennis

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 Dennis Experiment name IFEX
 Date 7/10/05 Aircraft 43RF Flight ID 050710I

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Mindy Mayew / Tom Shepherd</u>
Radar	<u>M. Black / Eric Uhlhorn</u>	Pilots	<u>Tebeast, Nelson</u>
Workstation	<u>Krystal Walde</u>	Navigator	<u>Devie Brock</u>
Cloud Physics	<u>Paul Willis</u>	Systems Engineer	<u>Dewie Floyd</u>
Photographer/Observer /Guests	<u>Shelby Staff (2)</u>	Data Technician	<u>Terry Lynch</u>
Dropwindsonde	<u>Krystal Walde</u>	Electronics Technician	<u>Damon San Souci</u>
AXBT/AXCP	<u>Eric Uhlhorn</u>	Other	

B. Take-off and Landing Times and Locations:

Take-Off: 1501 UTC Location: DAX NAS

Landing: _____ UTC Location: _____

Number of Eye Penetrations: 27

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>10/12</u>	<u>28.2</u>	<u>86.6</u>	<u>930</u>	<u>120 kt</u>
<u>10/18</u>	<u>29.4</u>	<u>87.2</u>	<u>?</u>	<u>120 kt</u>
<u>11/00</u>	<u>30.6</u>	<u>87.9</u>	<u>Just Inland Mobile Bay</u>	

D. Mission Briefing:

Flt Alt 12 kft, 35 sondes, 3 BTs
IP buoy 42036 - sonde, buoy 42039 - 2 sondes + 2 BTs
eye, buoy 42007, south ~ 30 mi, SE-NE track through
CSBR1 along coast east of eye, coastal run to west ~ 20 mi off,
buoy 42007, eye, just east of eye all 2 perpendicular
runs to coast, back to coast ~ 10 mi offshore. to
to 42007, eye SE, DAX
see map

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:

$$\begin{array}{r} 154545 \\ - 15000 \\ \hline 4545 \end{array}$$

$$\begin{array}{r} 154530 \\ - 10000 \\ \hline 4530 \end{array}$$

15

4545
100

545

$$\begin{array}{r} 154530 \\ - 15000 \\ \hline 4530 \end{array}$$

40

15 X 10,000

$$\begin{array}{r} 154530 \\ - 150000 \\ \hline 4530 \end{array}$$

$$\begin{array}{r} 4530 \\ - 4500 \\ \hline 30 \end{array}$$

45,3

14
M
S

sec

$$\begin{array}{r} 54000 \\ 14760 \\ \hline 68760 \\ 59 \\ \hline 68819 \end{array}$$

Lead Project Scientist Event Log

Date 7/10/05 Flight 070 LPS M. Black
050710I

Time	Event	Position	Comments
1501	Takeoff	Tax	
1509	Radar Start		
1529	Moving offshore to WSW. For JP 42036		
1531	F/105 2100 PRR		
1532	Alasty Bay 2175 west of ctr		
1534	eye about 160 mile to WSW, small concentric		
1539	Descend toward IP		
1542	Teal 99 ~ partially filled 8 mi across		
1514	29'16' 86.46' - Teal Fix		
155038	Turn to 270°		
155308	Drop #1 at 28.5, 84.53, Buoy 42036		no satellite
155405	Turn to Buoy 42039		
161349	Buoy 42039 ABT, Sonde #2 - 24 m/s		SFMR
16144	Turn to NW toward eye		CLH 1400
1618	Sending SFMR - Gudner X		
1622	29.24 86.56 35 miles NW of Buoy - 23 m/s		SFMR
1626	SW eye well		
1627	eye		
162811	Sonde NW eye 160 mi down drift		grapple
1637	Turn to SW 50 miles NW of eye to Buoy 42040		
1654	Turn to SW for Buoy 42040		
165732	Drop at Buoy 42040		
1658	turn to North to west of eye		
1701	Turn to east toward eye 64 mi W		
1705	Radar Down - reboot		
170540	Sonde #6 57 mile west of eye		

56 Kts SFC 35 kt Rfct

1708 ~ LF radar up

SFMR
~10-15 m/s

26.5°

25 m/s
Sonde

26.8°

Proor

FT-101 120 Kts inboard 102 Kts outboard

Proor #5

29 42
86.50

Lead Project Scientist Event Log

Date 7/10/05 Flight 0507106 LPS M. Slack

Penns Landfall

Time	Event	Position	Comments
1720	Eye	29 42' 86 53	
1721	East eyewall	Sonde 28° E 3 BT	49 miles 120 kts RT 100
1737	20 miles offshore	CSBF1	
174520	T3	29 56'	
174549	T3	29 58' 86 9' - 20 miles offshore	
175030	Sonde	75.74 30.18 86.54°	
175328	Hdg west north of eye	between coast + eyewall	
175713	Sonde	T6	
180			
1804		30.00 87.84 20 kts RT 100 50 sec	
180859	Sonde	29.88 88.23 end coast 90 nm	
181950	SW of eye	40 miles - turning to eye	
183207	SW eyewall	Sonde no launch detected	
1833	Eye		
183427	SE eyewall	50 miles 5 kts	
1842	turn to		
1843	Sonde	14 on shore - 72 kts	
184348	Sonde	12	
184434	Sonde	13	
184534	Sonde	14	
184	at coast turn to eye		
185260	NE eyewall	no launch detected	
185355	NE eyewall	Sonde no launch detected	
1855	SE eyewall		
1859	SE of eye	~45 miles heading to coast	

eye

No
Lum

at 100
Pr 100

at

1
2

Lead Project Scientist Event Log

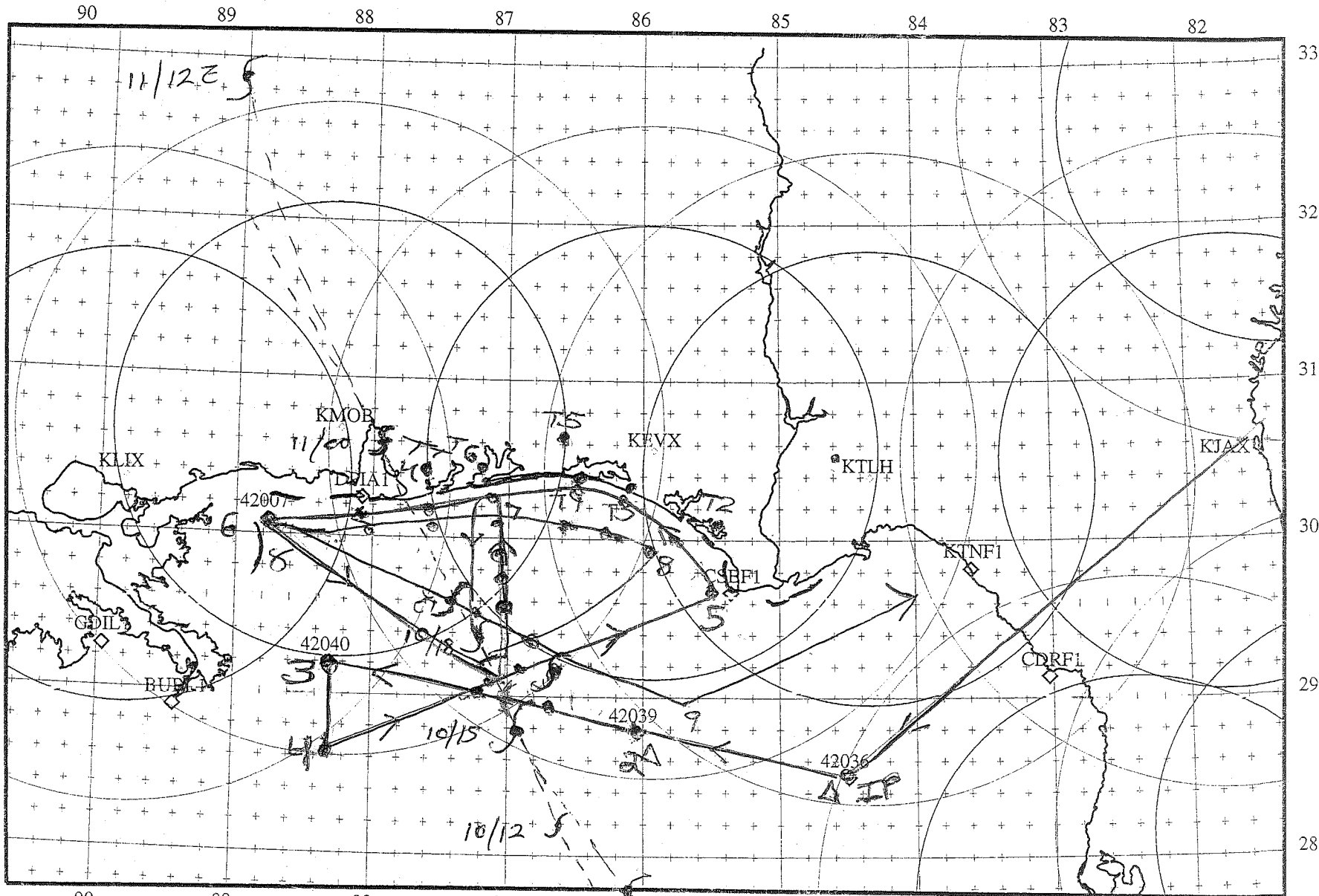
Drop

[illegible]

Fit Alt = 12,000 ft ~ 30 sondes
2 AXBTs

Vol 30° 21'
TTU 87° 32'

mob_evx_tlh_map.ps Center Lat: 30.50 Lon: -86.00



DP1A1
30.25
~~89.02~~
88.07

0 50 100 150 km

42007 30.09
88.77

230 km range rings
160 km haze rings

42036	28.51	84.81
42039	28.80	86.06

42040 29.21 88.20

Temp 04 10K }
(TAST) 99 8K } Pressure

~~2984~~

N 29 00

W 84 00

L I N I K N

5043

Cance Delivery
VHF-134.775