050907 17 Ophelia

E.2 Lead Project Scientist

E.2.1 Preflight

MB 1. Participate in general mission briefing.

MB 2. Determine specific mission and flight requirements for assigned aircraft.

MB 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.

MB 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.

MB 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.

MB 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.

E.2.2 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).

E.2.3 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.

Form E-2

TS Ophelia

Lead Project Scientist Check List

Date 9/7/05 **Aircraft** 42RF **Flight ID** 050907H

A. —Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	M. Black	Flight Director	Tom Shepherd
Radar	M. Black	Pilots	Phil Kennedy, Tom Strong
Workstation	M. Black	Navigator	Pete Siegel
Cloud Physics	—	Systems Engineer	Steve Wade
Photographer/Observer /Guests	Melicie DesRosiers	Data Technician	Sean McMillan
Dropwindsonde	G	Electronics Technician	Mark Rogers
AXBT/AXCP	—	Other	P. Chang, Dann, 2 others

B. Take-off and Landing Locations:

Take-Off: 1337 Location: MacDill

Landing: ________ Location: ________________

Number of Eye Penetrations: 3-4

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
07/15	28°24'	79°12'		

D. Mission Briefing: Recco, 5 kft, 15, 18, 21 Z fixes 105 nmi legs, starting NW-SE then N (downwind) to NE→SW
2: 12-20 drops, 60 nmi, 30 nmi, eye, ~~midpoint downwind leg~~

TS Ophelia 1 of 2

Lead Project Scientist Event Log

Date 9/7/05 **Flight** 050709H **LPS** M. Black

Time	Event	Position	Comments
1427	AT IP	105 nmi	NW of ctr, hdg SE
1441		NE wind	30 kt
[illegible]	60 miles	NW of ctr	Drop #
144951	28.79	79.36	Center — Drop #2
144803	- Drop #3	~15 miles out	
150612	Drop #4	60 nmi SE	— no winds — Aoc
1519	105 nmi	SE turn to	NW
1553	105 nmi	NE turn to SW	
	near active	bands/cells	
1602-1605	in strong	convection	
160839	Drop #5	60 nmi NE	
161350	Drop #6	30 nmi NE	
1624	Circling	in eye,	missed center
162709	28.76	79.37	eye
	eye forming,	eyewall open	NE
	Drop #7	eye	drop — eye — Aoc
163948	Drop #8	30 mi	SW
1719	105 nmi	SE	trying to form
	hdg NW	to eye	
1730	SFMR	(both?)	reading wrong/too
173710	30 miles	SE of ctr	Drop #9 high
	52 kts	FL-[illegible]	
1747	circling	in eye	for fix
175105	28.76	79.31	eye Drop Aoc
180210	Drop #11	35 miles	NW
1821	105 nmi	NW —	turn around to ctr

motion [illegible]

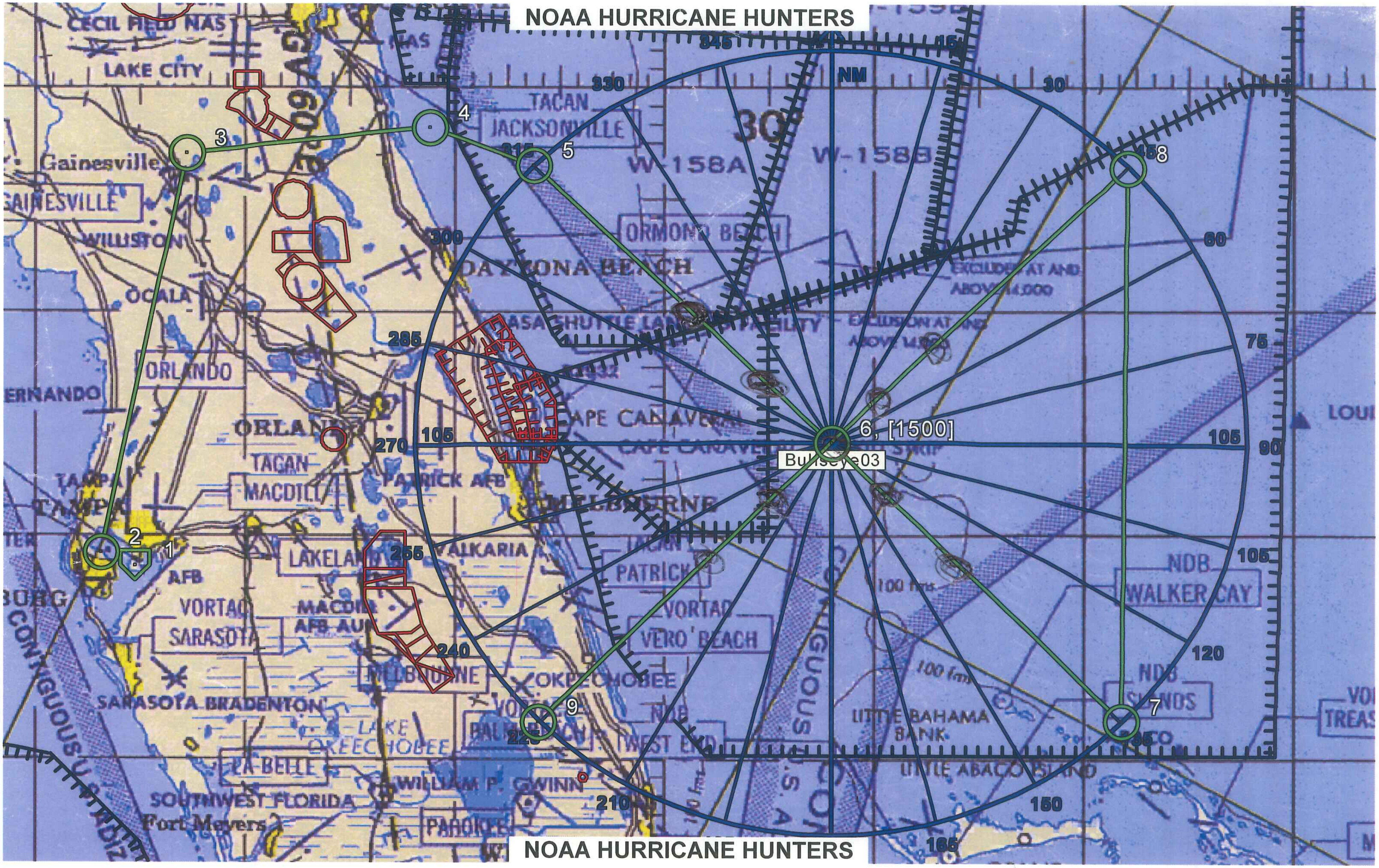
Ophelia

2 of 2

Lead Project Scientist Event Log

Date 9/7/05 **Flight** 050907H **LPS** M. Black

Time	Event	Position	Comments
1850	circling in for fix		
1856	eye	28.7°N 79.3°W	
	exit to	SW	
1905	Turn N	along coast	Climb out
1954	Landing Melbourne		


NOAA HURRICANE HUNTERS
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2
3
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Bullseye03
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NM
CECIL FIELD NAS
LAKE CITY
Gainesville
GAINESVILLE
WILLISTON
OCALA
ORLANDO
ERNANDO
TAMPA
TACAN
MACDILL
PATRICK AFB
LAKELAND
VORTAC
SARASOTA
SARASOTA BRADENTON
LAKE OKEECHOBEE
LA BELLE
SOUTHWEST FLORIDA
Fort Meyers
WILLIAM P. GWINN
OKEECHOBEE
WEST END
TACAN
JACKSONVILLE
W-158A
W-158B
ORMOND BEACH
DAYTONA BEACH
EXCLUDED AT AND ABOVE 14,000
EXCLUSION AT AND ABOVE 14,000
CAPE CANAVERAL
MELBOURNE
VALKARIA
PATRICK
VERO BEACH
NDB
WALKER CAY
LITTLE BAHAMA BANK
LITTLE ABACO ISLAND
TREAS
100 fms
345
330
315
300
285
270
255
240
225
210
165
150
135
120
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90
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NOAA HURRICANE HUNTERS