19930831HI.LPS

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

_____ 1. Participate in general mission briefing.

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

_____ 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist and CARCAH unless briefed otherwise by field program director.

_____ 4. Contact HRD members of crew to:

a. Assure availability for mission.
b. Arrange ground transportation schedule when deployed.
c. Determine equipment status.

_____ 5. Meet with AOC flight crew at least 90 minutes before takeoff, 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 or FGOC at remote recovery location).

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 Form E-2.

E.2.3 Postflight

_____ 1. Debrief scientific crew.

_____ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).

_____ 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. Determine next mission status, if any, and brief crews as necessary.

_____ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

Form E-2
Page 1 of 5

On-Board Lead Project Scientist Check List

Date 8/31 Aircraft 42RF Flight ID 93083/H

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	P. Black	Flight Director	J. Garrish
Cloud Physics		Pilots	Dave F, Howard
Radar	M. Black, B. Cristoe	Navigator	Berry
Workstation		Sys. Engr.	J. Riles
Photographer		Data Tech.	
Omegasonde		El. Tech.	
AXBT/AXCP		Other	

Take-Off	Location	Landing	Location
1537Z	MIA		

B. Past and Forecast Storm Locations

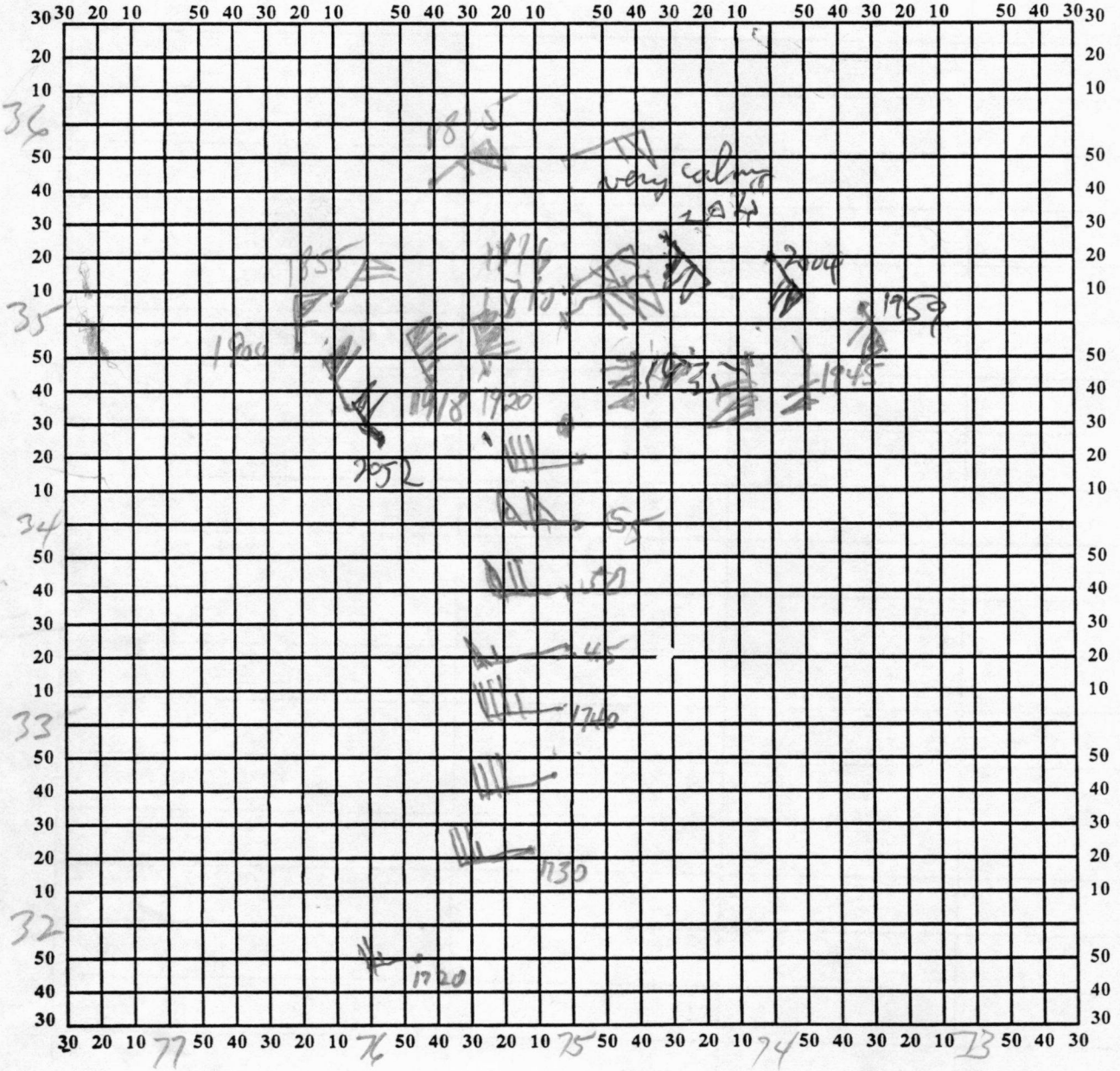
Date/Time	Latitude	Longitude	MSLP	Max. Wind
31/1103Z	33° 25'	74° 31'	965	104 Squad
31/18Z	34.1	75.3		

C. Mission Briefing

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date 8/31/93 Aircraft 42RF Observer S Black



Note: Label full degrees according to location of flight area.

192 Chevy Rt 340 17 + 28

Lead Project Scientist Event Log

Date ________________ Flight ________________ LPS ________________

Time	Event	Position	Comments

Lead Project Scientist Event Log

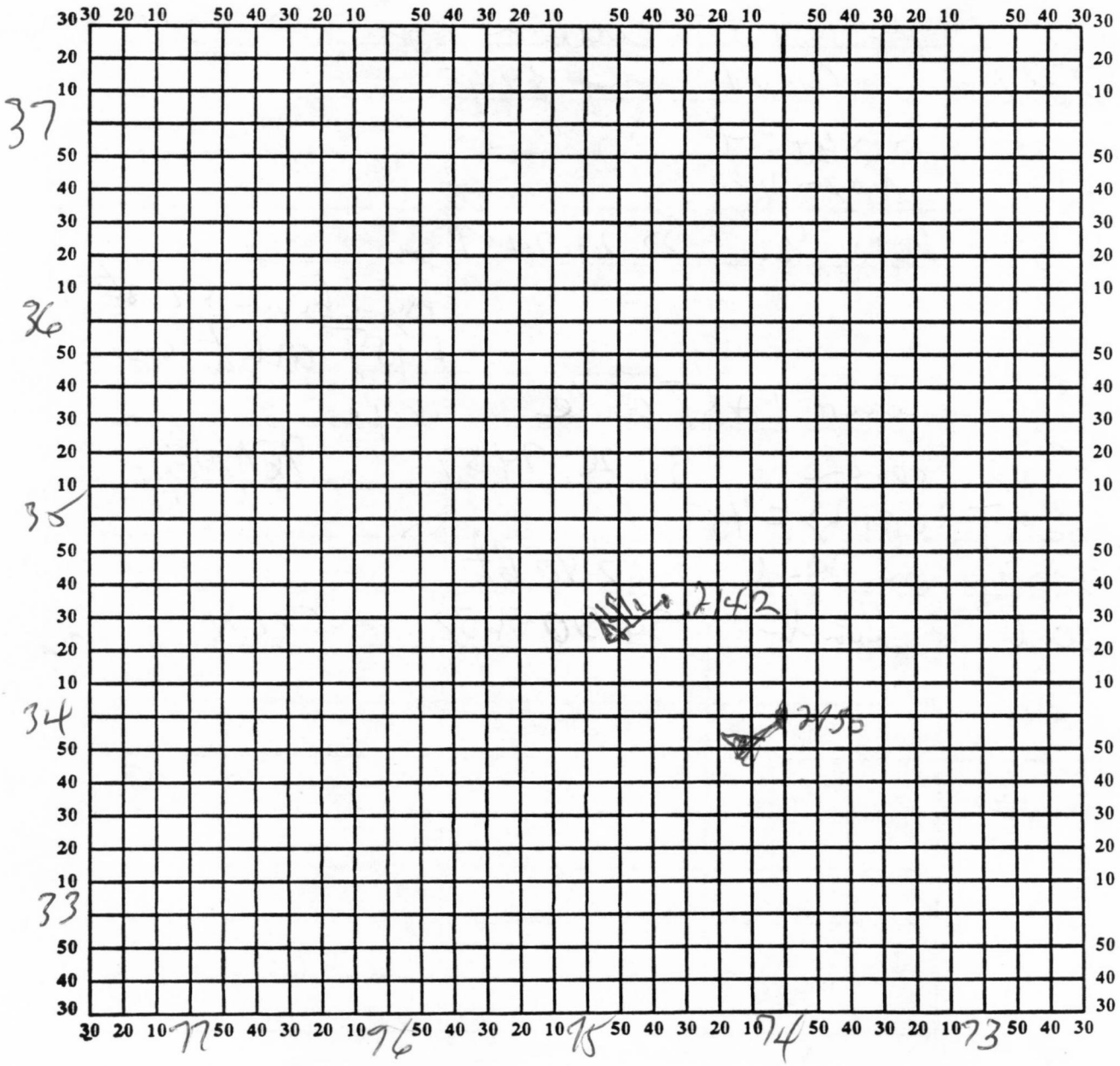
Date _____ Flight _____ LPS _____

Time	Event	Position	Comments
	do a FAST circle in	eye ⑦	right turn, upwind
2231	over CHLVN	wind 39 kt	
2246	over 44014		
2300	VMAX = 115		
2305	RMZN = 960	35 29 7459	
2312			begin turn to start
			FAST orbit inside
2336	end FAST circle		eye
2340	center	35 26 7457	961 MB
2345	VMAX = 115		
2350	over DSLN	WS2 90 kt	
0010	climb	34 30 76 37	over CRLN

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date _____ Aircraft _____ Observer _____



Note: Label full degrees according to location of flight area.

2150 35 14.5 75 10' 4J

Form E-2
Page 5 of 5

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

Time	Event	Position	Comments
1708 45	BTS NG	3432 7621	drop failed
191458	BT6 28.1	3438 7554	
1922	VMAX=140	pk, 130 mst	
1928	PMIN=964	3458 7540	PEI 963.2
1930			lyr open east
194143	BT7 26.6		pea Tale pix 75 kt
195310	turn pt ④	3455 7316	
195[illegible]	outer concentric band forming		
	wind eyewall contracting 30 mi dia		
			was 40 mi dia
2004	Fr 10411	photo 75 kt wind	
2015	BT8 29.4		pt ⑤
2032	VMAX=120		Pmin = 961
2035		3504 7508	←
2039	VMAX=140		
2100	pt ⑥	3359 7618	
2129	pt ⑦	3403 7358	
2130	43 fix	35°11.5 7510	
2152	VMAX=135		
2157	PMIN=960	3513.5 7509	
2119	abeam BUCK		

Lead Project Scientist Event Log

Date ________ Flight 930831H LPS P. Black

Time	Event	Position	Comments
1600 ~~1737~~	West End	2643 7856	over C-MAN
	SPGF	26.7 79.0	
next	4/010	28.9 ~~80~~ 78.5	
~~162455~~	~~over 41010~~		
163250	over 41010		
1702			1724 ETA descent in comm
1517	eye	~~1517~~ 3403	967 105 kt
1720		7503	start descent
1725		32 10 7523	3,000 ft
172839	over 41002	3220 7513	photo fr #20
1729	AP fix	34 30 7508	fix 132 kt w/ adj
175140	BT/ CH14	33 745	BT1 25.7 17530
1758	VMAX=131		
180445	BT2 eye	3435 7507	PMIN=965
1818		3435 7509 GPS	030 sfc wind
			060 FL
1815	VMAX N		120 kt
182045	BT3 27.4°	3522 7507	80 kt lightning
1836	turn point	tur 3615 7511	
1838	BT4 ?	3610 7515	start FAST on TA
190430	PSLN abeam	3430 7635	turn pt (3)

D. Equipment Status

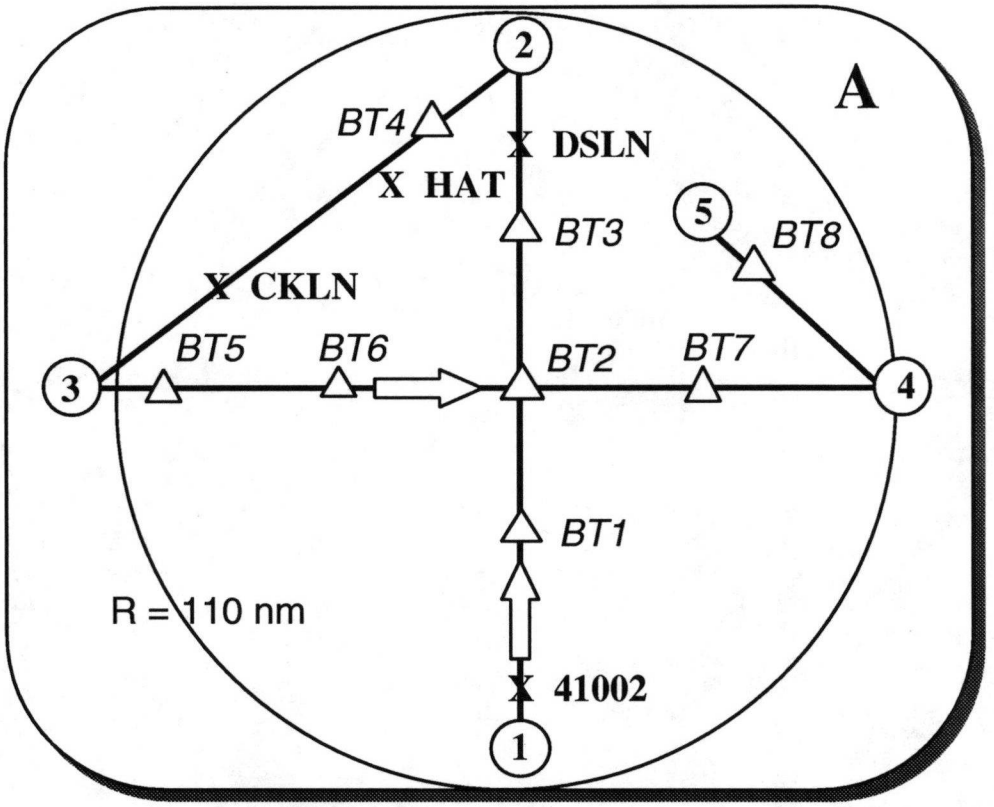
Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft			
Radar/LF			
Radar/TA (Doppler)			
Cloud physics			
Data system			
Omegasondes			
AXBT/AXCP			
Workstation			
Photography			

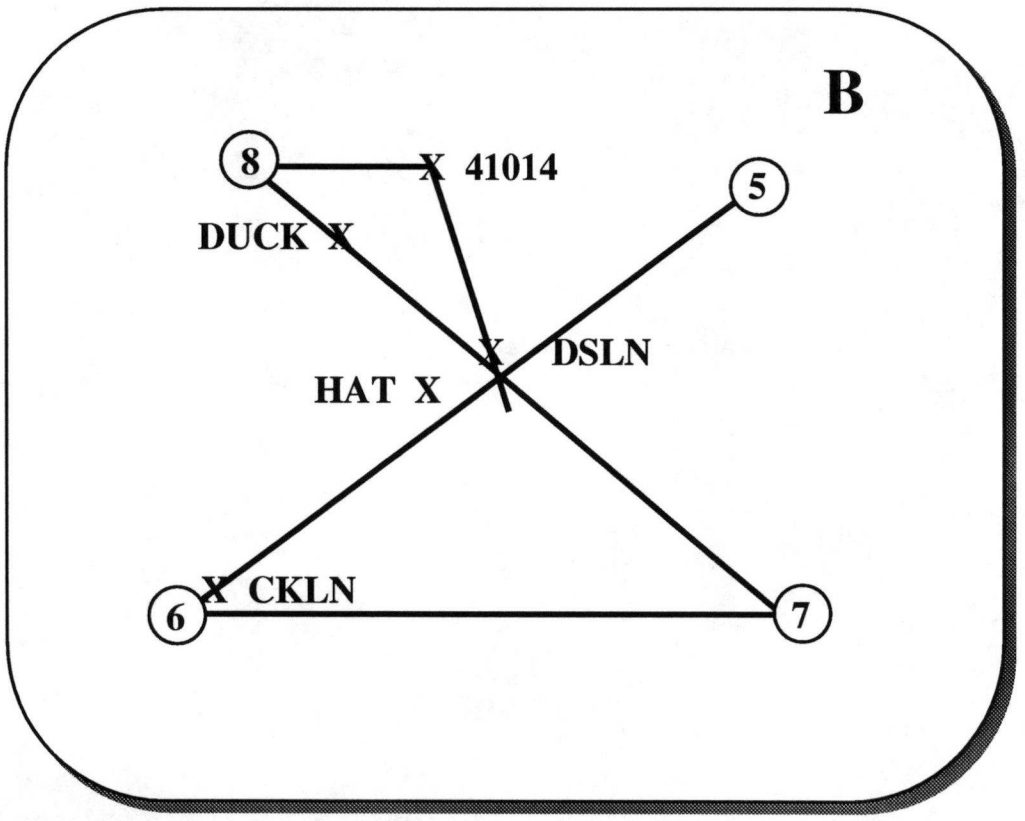
REMARKS:

E. I. Proposed Flight Pattern (sketch or designate by number)

E. II. Actual Flight Pattern

EMILY 930831H





Hurricane Research Division

LEAD PROJECT SCIENTIST CHECKLIST

Date: *31 Aug. 93* Aircraft IDs: ***42RF***

Proposed Takeoff Time: *1537Z* Base of Operations: *MIA*

Primary Mission: *SFC Winds* Alternate Mission: *none*

Scientific Crew:

	42RF	*43RF*
LPS:	*P. Black*	
Doppler Sci.:	*M. Black*	
Doppler Op:	*B. Cristoe*	
Cloud Phys:	*none*	
ODW:	*none*	
Others:	*J. Dorschner/Herald*	
Others:		

Mission Briefing (including proposed flight pattern):

Rotated fig 4 at 3,000 ft PA, initially N-S leg parallel to Air Force pattern above us at 5,000 ft PA. Overfly surface buoys and C-MAN stations wherever possible.

SIGNATURE