

900831I
19900831I-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). 0015/57 Z
- ☐ 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.

On-Board Lead Project Scientist Check List

Date 8/31/90 Aircraft 43RF Flight ID 900831I

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Willis</u>	Flight Director	<u>Parrish</u>
Cloud Physics	<u>Kaplan</u>	Pilots	<u>Turner / Philippsbourne</u>
Radar	<u>Dodge</u>	Navigator	<u>Henderson</u>
Workstation	<u> </u>	Sys. Engr.	<u>Al Goldstein</u>
Photographer	<u> </u>	Data Tech.	<u>Lynch</u>
Omegasonde	<u>Willoughby, Gamache</u>	El. Tech.	<u>Lino</u>
AXBT/AXCP	<u> </u>	Other	<u> </u>

Take-Off	Location	Landing	Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>31/152</u>	<u>32.6</u>	<u>56.6</u>	<u> </u>	<u> </u>
<u>FCST / 182</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>AF FIX 31/1341</u>	<u>32.1 / 57.1</u>	<u> </u>	<u>962mb</u>	<u>95knot</u>
<u>31/1649</u>	<u>32/45</u>	<u>56/46</u>	<u>960mb</u>	<u>80kts west eye all</u>
<u>1753</u>	<u>32/54</u>	<u>56/43</u>	<u> </u>	<u> </u>
<u>1919</u>	<u>33/13</u>	<u>56/25</u>	<u> </u>	<u> </u>
<u>2028</u>	<u>33/27</u>	<u>56/12</u>	<u>960</u>	<u>040/17kts</u>
<u>2159</u>	<u>33/51</u>	<u>56/01</u>	<u> </u>	<u> </u>
<u>2230</u>	<u>34/00</u>	<u>55/55W</u>	<u>972mb</u>	<u>11NNW/15knots</u>

C. Mission Briefing

Energetics/Budgets Enter pattern as high an alt. tide
as possible, 52 drops at turns (after)

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	<u>✓</u>	<u>✓</u>	<u> </u>
Radar/LF	<u>✓</u>	<u>✓</u>	<u> </u>
Radar/TA (Doppler)	<u>✓</u>	<u>✓</u>	<u> </u>
Cloud physics	<u>✓</u>	<u>CLOUD PROBE ONLY OPERATING</u>	<u> </u>
Data system	<u>✓</u>	<u>✓</u>	<u> </u>
Omegasondes	<u>✓</u>	<u>OK AFTER INITIAL FAILURE</u>	<u> </u>
AXBT/AXCP	<u> </u>	<u> </u>	<u> </u>
Workstation	<u> </u>	<u> </u>	<u> </u>
Photography	<u> </u>	<u> </u>	<u> </u>

REMARKS:

SONDE ANTENNA CONNECTOR REPAIRED IN FLIGHT

*Carly
0015/57*

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

See Attached

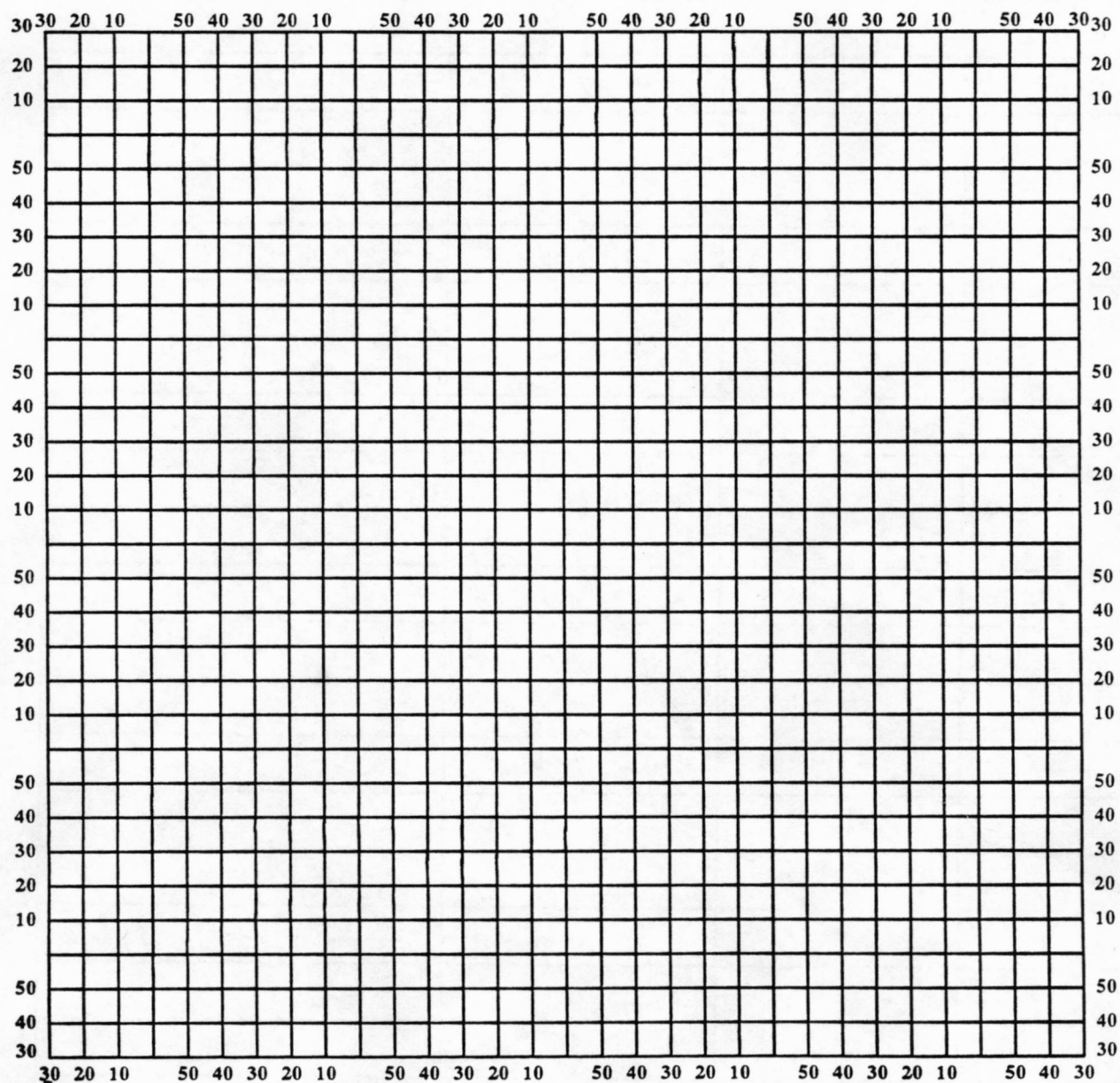
E. II. Actual Flight Pattern

See Attached

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.

Lead Project Scientist Event Log

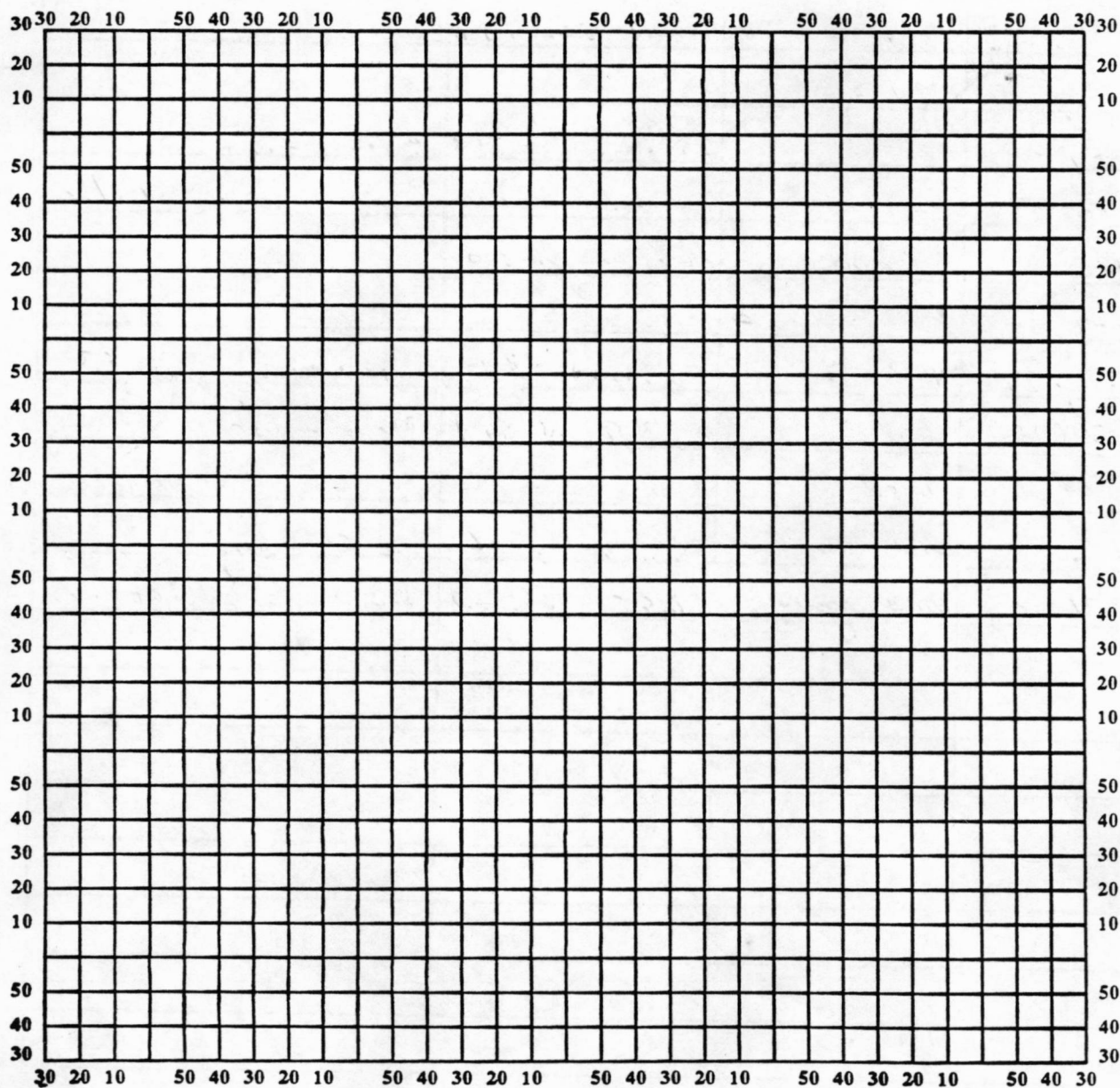
Date 8/31/90 Flight 900831I LPS Willis

Time	Event	Position	Comments
1502	TAXI		
1515/30	T/O	22 21.8/64 41.4	
1603/18	31 27.2	60 48.7 575.8	$\frac{-1.6}{-4.2}$ 279/16
1607	SONDE DIDNT GO OUT		(orbiting) - door stuck
1617/30	DROP #1	31 22.8 60 28.9	576.6 $\frac{-1.6}{-3.0}$ looks ok
1619	sonde failed		
1635/06	DROP #2	31 2.9/58 53.9 568.2	$\frac{-2.0}{-7.1}$ 293/36 PTH OR SONDE BAD
1638/26	DROP 2B	30/47.0 58/56.7	563.2 $\frac{-2.3}{-10.4}$
	paired ports	No drop	
1727	will revert to descent	ascent problem on outer ring	
1736/10	sonde test	29/26.8 56/23.0	482.9 $\frac{-8.8}{-12.1}$ 245/32
1751/49	POINT 6 SONDE	30 34.1/55 37.9	478.5 $\frac{-9.3}{-7.6}$ 237/42 looks ok
1811/10	POINT 7 SONDE	29 56.2/54 4.3	453.3 $\frac{-12.1}{-11.3}$ 233/28
1829/13	POINT 8 ?	31 25.9 54 4.9	453.8 $\frac{-12.6}{-13.6}$ 218/45
1846/55	POINT 9 ?	31 52.0 52 29.7	432.6 $\frac{-14.5}{-23.8}$ 187/25
1904/55	DROP AT POINT 10 ?	33/2.4 53 31.8	433.1 $\frac{-12.6}{-10.8}$ 201/39
1921/24	DROP AT 11 ?	34/2.8 52 32.6	433.2 $\frac{-13.0}{-23.8}$ 188/32
1954/42	#13 DROP	35/54.2 53/55.7	433.5 $\frac{-13.2}{-24.3}$ 161/31
2011/51	#14 DROP	35/29.3 55/25.7	433.9 $\frac{-11.9}{-11.1}$ 135/41 IN ICE
2028/15	#15 DROP	36/39.1 56/4.7	434.1 $\frac{-12.5}{-12.2}$ 155/29 IN THIN ICE CLOUD
2047/59	#16 DROP	35/26 57/10	434.3 $\frac{-11.8}{-11.8}$ 106/31

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.

Lead Project Scientist Event Log

Date 900831 CONT Flight ^{Gustavo} 900831 I/I LPS Willis

[illegible]

AF 1341Z
12 1649

32.1N 57.1W
32.45 56.46W

962mb 95kts 700mb
960mb from 10,000 80kts
Form E-6

HRD Omega-Dropwindsonde Scientist Log

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Flight 900831I

ODW Scientists Willoughby
Gamache

Storm Gustav

Operator Lino

Drop #	Sonde ID #	Time GMT	Lat. (°)	Long. (°)	Wind (m/s) (WD/WS)	Height (GA)	Temp. (TA)	Dew Pt. (TD)	Pressure (PS)	Remarks
1	10846	1617	31°23'	60°29'	287/10	4755	-1.8	-4.4	576.8	Failed
2	20296	1635	31°2'	58°54'	217/18	4836	-1.9	-6.8	568.5	Bad
3	02556	1639	38°46'	58°51'	263/16	4924	-2.3	-14.5	562.9	Signal problem
4	20293	1736	29°27'	56°23'	244/16	6147	-8.9	-11.8	483.0	OK
5	02555	1752	30°34'	55°37'	238/21	6197	-8.9	-11.6	478.8	FAILED BELOW 850
6	20292	1811	29°56'	54°04'	237/15	6637	-12.4	-12.4	453.5	GOOD
7	02554	1829	31°25'	54°05'	215/23	6613	-12.7	+3.4	454.0	GOOD
8	10845	1847	31°51'	52°29'	190/13	6997	-14.5	-22.9	432.5	GOOD
9	21408	1905	33°02'	53°32'	199/19	6959	-12.5	-18.5	433.5	GOOD
10	03474	1921	34°03'	52°32'	185/15	6966	-13.1	-24.5	433.3	PARACHUTE FAILED BELOW 850
11	21406	1937	34°27'	54°07'	169/20	6935	-12.1	-10.7	433.6	GOOD
12	03473	1955	35.9	53.9	158/15	6944	-13.4	-24.0	433.5	GOOD
13	20116	2011	35.4	55.4	136/20	6900	-11.9	-10.7	434.0	GOOD
14	02558	2028	36.6	56.1	157/30	6917	-12.5	-11.9	434.1	

Flight _____

ODW Scientists _____

Storm _____

AUG 31 1999

Operator _____

[illegible]

900931J

SEA-LEVEL PR

