

19910812II-LPS

AUG 12 1991

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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 OAO 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 OAO 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 OAO flight director/meteorologist 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 OAO flight director.]
- _____ 4. Obtain a copy of the 10-s flight listing from the OAO 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 8/12/91 Aircraft 43RF Flight ID 910812I

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Willis/Marley</u>	Flight Director	<u>Parrish</u>
Cloud Physics	<u>B. Blach</u>	Pilots	<u>McKim/Plager</u>
Radar	<u>Kabeche/Jorgensen</u>	Navigator	<u>Strang/Nokubs</u>
Doppler	<u>Houze</u>	Sys. Engr.	<u>Wade</u>
Photographer	<u>←</u>	Data Tech.	<u>Lynch</u>
Omegasonde	<u>←</u>	El. Tech.	<u>Roles</u>
AXBT/AXCP	<u>←</u>	Other	<u>Hallett</u>

Take-Off	Location	Landing	Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind

C. Mission Briefing

CAPE

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	<u>✓</u>	<u> </u>	<u> </u>
Cloud physics	<u>✓</u>	<u> </u>	<u> </u>
Data system	<u>✓</u>	<u> </u>	<u> </u>
Omegasondes	<u>—</u>	<u> </u>	<u> </u>
AXBT/AXCP	<u>—</u>	<u> </u>	<u> </u>
Doppler	<u>✓</u>	<u> </u>	<u> </u>
Photography	<u>—</u>	<u> </u>	<u> </u>

tapes

*7
5*

REMARKS:

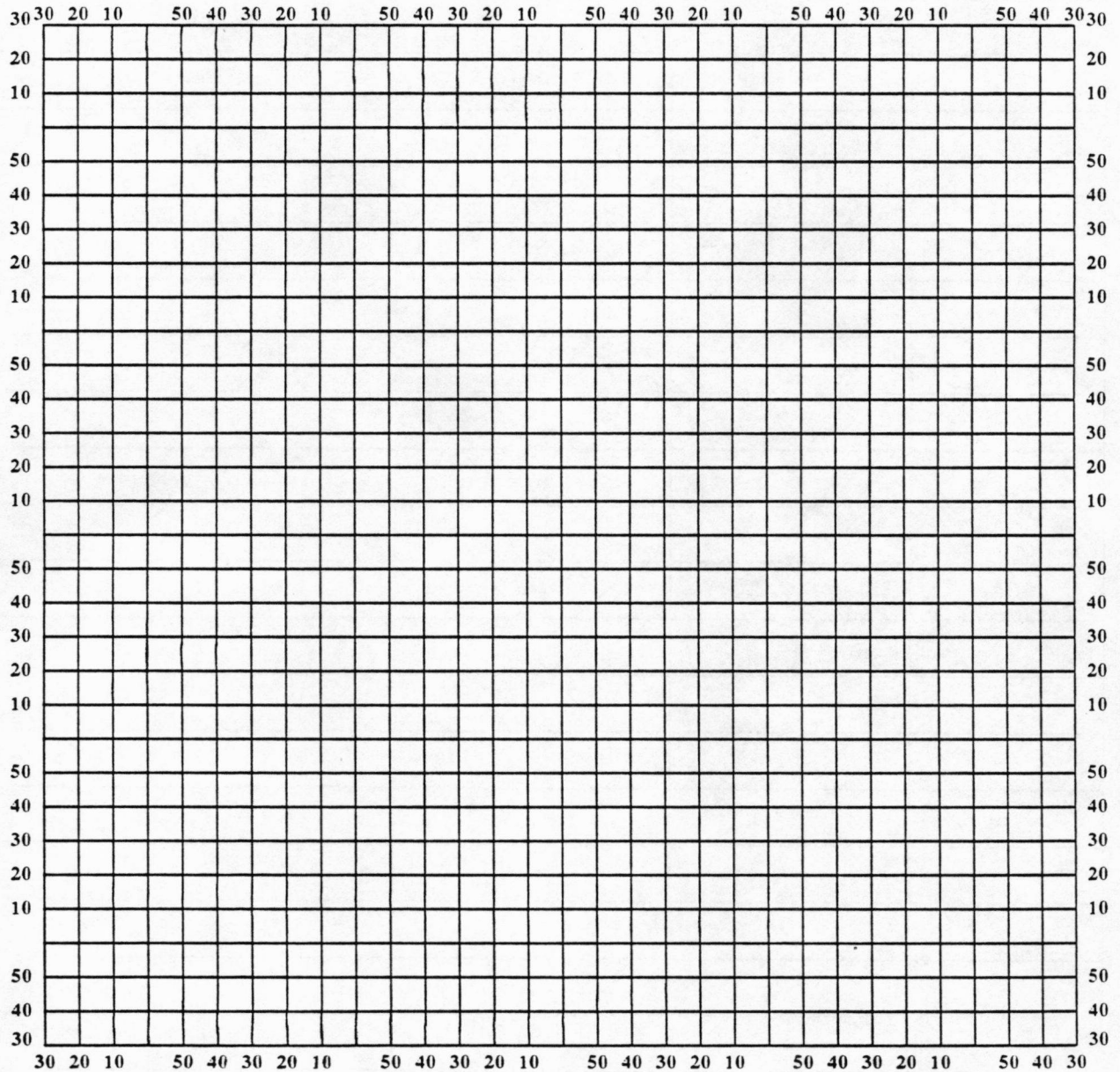
E. I. Proposed Flight Pattern (sketch or designate by number)

E. II. Actual Flight Pattern

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date _____ Longitude _____ Observer _____



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

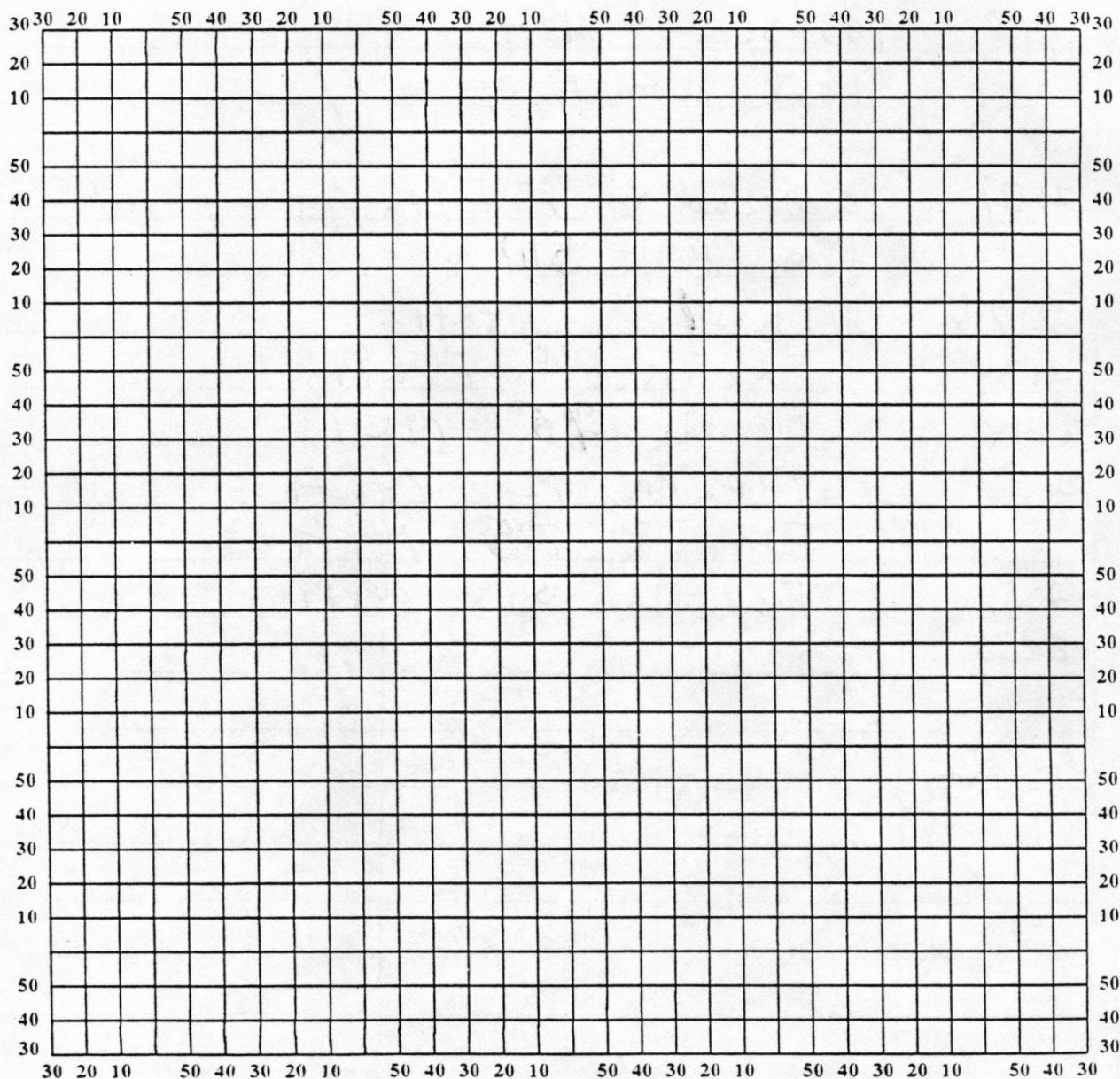
Date 8/12/91 Flight 910812I1 LPS Manly

[illegible]

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date _____ Longitude _____ Observer _____



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

Lead Project Scientist Event Log

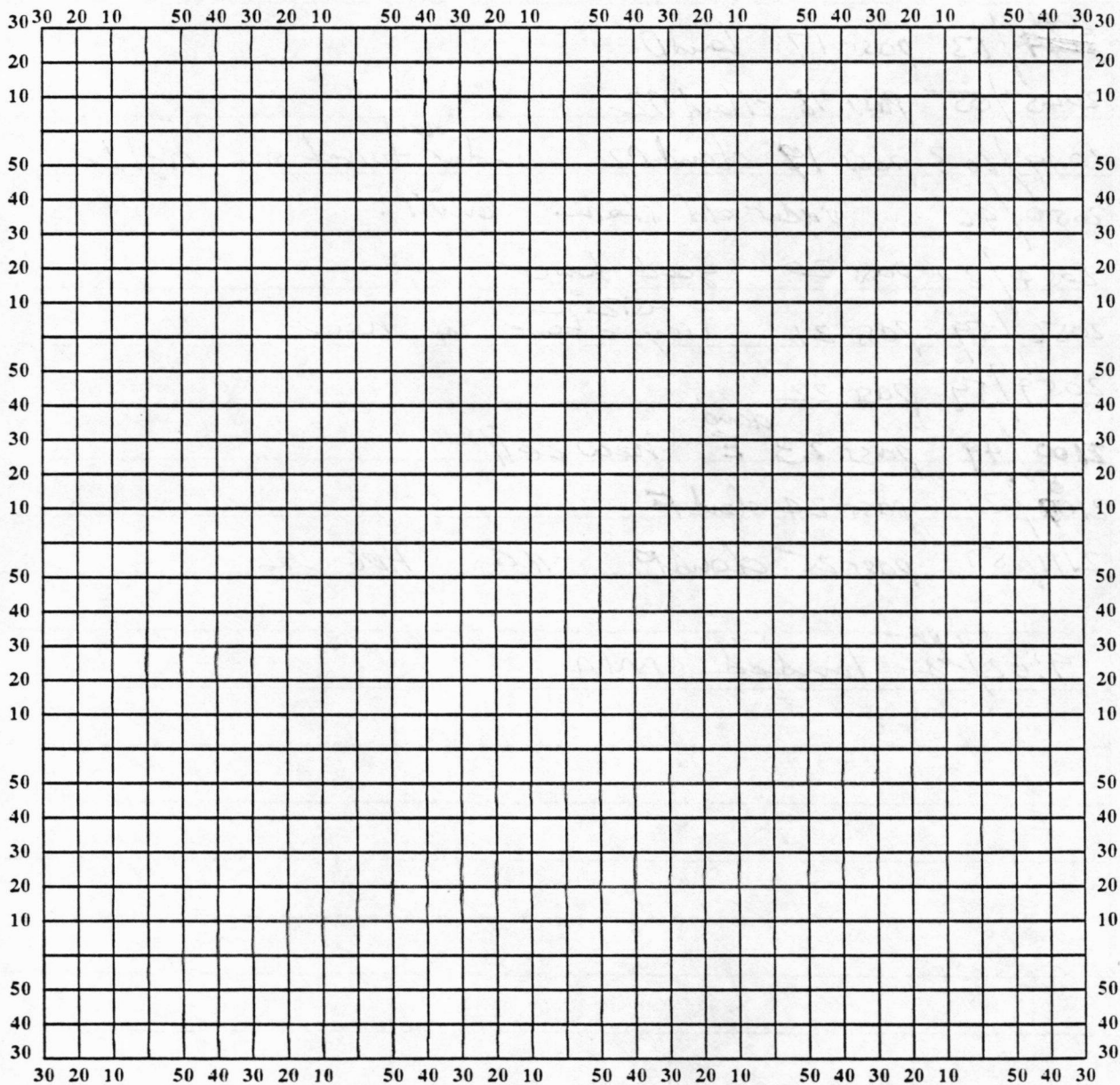
Date 8/12/91 Flight 910812I1 LPS Marlin

Time	Event	Position	Comments
TO	183556	MIA	
	Paul does first half.		
2121	descend to 13 kft. set up radial from CP-4 SW along		
2126	TK 215°	14kft.	
2134	Turn TK 34°	14 kft	
2144	Turn TK 215°	14kft.	
2154	Turn TK 42	14kft.	
2201	Turn TK 285°	14kft.	
2211	Turn TK 55°	14kft	
2225	Turn TK 235°	14kft	
2234	Turn TK 060°	14kft	
2244	Turn TK 250°	14kft	
2252	Turn TK 055°	14kft	
225955	Turn TK 360°	14kft to work	
	with CP-2 recommended		
IP 011°/34 km from	IP - 210° heading		
2307	moving up line near CP-2		
2317	Turn TK 210° with CP-2	Pass over CP-2	
2324	Turn TK 020° with CP-2	Pass over CP-2	
2336	Turn TK 200	pass East of CP-2	

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date _____ Longitude _____ Observer _____



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

Lead Project Scientist Event Log

Date 12 Aug 91

Flight 910812II

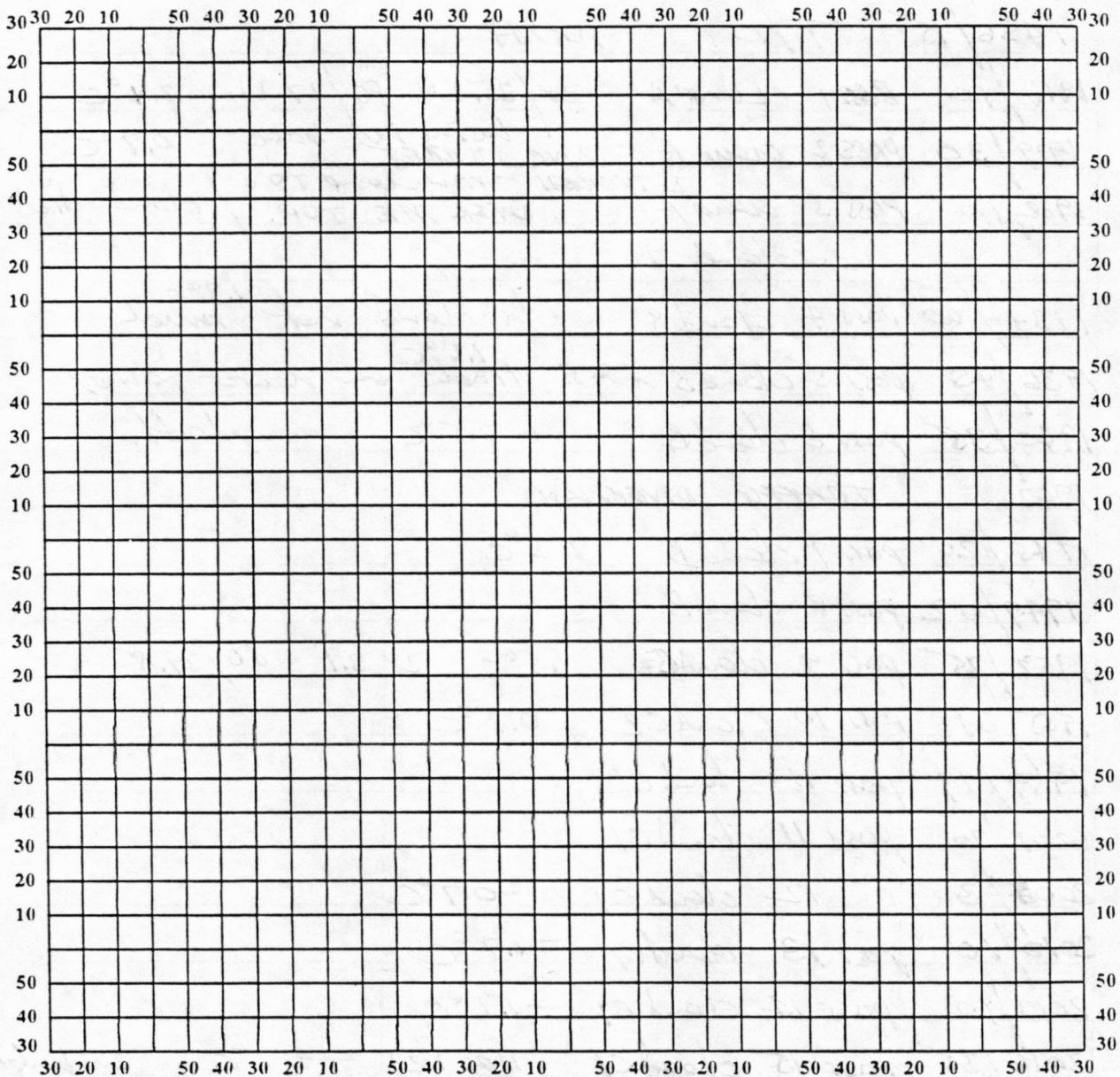
LPS Markus / Bogensch / Willis

[illegible]

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date _____ Longitude _____ Observer _____



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

Lead Project Scientist Event Log

Date 12 Aug 91

Flight 910812T1

LPS Marks/Jargender/Winn

Time	Event	Position	Comments
1436/15	T/O	MIA	
1916/10	PASS 1 CLOUD A	28/35.2N 80/37 W	2.0°C
1919/30	PASS 2 CLOUD A	losing its base 2ND TURNED	0.7°C
1922/10	PASS 3 CLOUD A	2 TURNED - new cloud to S OVER THE TOP.	cloud died
	new cloud B		
1934/20	PASS 4 cloud B	old cloud not much	1.7°C
1936/45	PASS 5 cloud B W to E track	on newer tower	1.6°C
1940/35	PASS 6 cloud B	+ 2.5°C	no updrafts
1942	TRAFFIC DIVERSION		
1945/20	PASS 7 cloud B	1.3°C	
1949/02	PASS 8 cloud B		
1952/35	PASS 9 cloud C1	1.5°C 28 3.1 80/39.8	
1955/31	PASS 10 cloud C2	0.7°C	
1959/19	PASS 11 cloud C1		
2001/20	PASS 11 cloud C1		
2005/30	PASS 12 cloud C1	-0.7°C	
2010/10	PASS 13 cloud C1	-1.7°C	
2013/10	PASS 14 cloud C1	-1.1°C	
2016/35	PASS 15 cloud C1	100% 221	-4.7°C 2 bubbles
2020/49	PASS 15 C1	maybe on left of, no was original cloud	
	PASS 16 C1+	new cell, original died	