

## 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.

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Form E-2  
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# On-Board Lead Project Scientist Check List

Date 8/7/91 Aircraft 43RF Flight ID 910807I1

## A. Participants

| HRD             |                            | OAO             |                          |
|-----------------|----------------------------|-----------------|--------------------------|
| Function        | Participant                | Function        | Participant              |
| Lead Proj. Sci. | <u>Maiks/Willis</u>        | Flight Director | <u>Parrish</u>           |
| Cloud Physics   | <u>Black</u>               | Pilots          | <u>Mckim/Player</u>      |
| Radar           | <u>Houze/Kabeche/Putan</u> | Navigator       | <u>Strang/No Kubr</u>    |
| Doppler         | <u>Testud</u>              | Sys. Engr.      | <u>Raines/Lynch</u>      |
| Photographer    | _____                      | Data Tech.      | <u>Hanchele</u>          |
| Omegasonde      | _____                      | El. Tech.       | _____                    |
| AXBT/AXCP       | _____                      | Other           | <u>Hallett, Saunders</u> |

| Take-Off | Location   | Landing | Location |
|----------|------------|---------|----------|
|          | <u>MIA</u> |         |          |

## B. Past and Forecast Storm Locations

| Date/Time | Latitude | Longitude | MSLP  | Max. Wind |
|-----------|----------|-----------|-------|-----------|
| _____     | _____    | _____     | _____ | _____     |
| _____     | _____    | _____     | _____ | _____     |
| _____     | _____    | _____     | _____ | _____     |
| _____     | _____    | _____     | _____ | _____     |
| _____     | _____    | _____     | _____ | _____     |

## C. Mission Briefing

CAPE

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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D. Equipment Status

| <u>Equipment</u> | <u>Pre-Flight</u> | <u>In-Flight</u> | <u>Post-Flight</u> |
|------------------|-------------------|------------------|--------------------|
| Aircraft         | ✓                 |                  |                    |
| Radar            | ✓                 |                  |                    |
| Cloud physics    | ✓                 |                  |                    |
| Data system      | ✓                 |                  |                    |
| Omegasondes      | X                 |                  |                    |
| AXBT/AXCP        | X                 |                  |                    |
| Doppler          | ✓                 |                  |                    |
| Photography      | ✓                 |                  |                    |

tapes

2  
5

REMARKS:

Charge probe ↑  
radar ↑  
cloud physics ↑  
field mills ↑

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

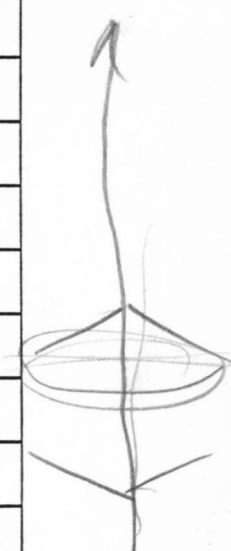
E. II. Actual Flight Pattern

True at 25° Latitude, in Degrees and Minutes of  $\phi$  and  $\lambda$ .

A blank 50x50 grid with numerical scales on all four sides. The top and bottom scales are labeled 30, 20, 10, 50, 40, 30, 20, 10. The left and right scales are labeled 30, 20, 10, 50, 40, 30, 20, 10.

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

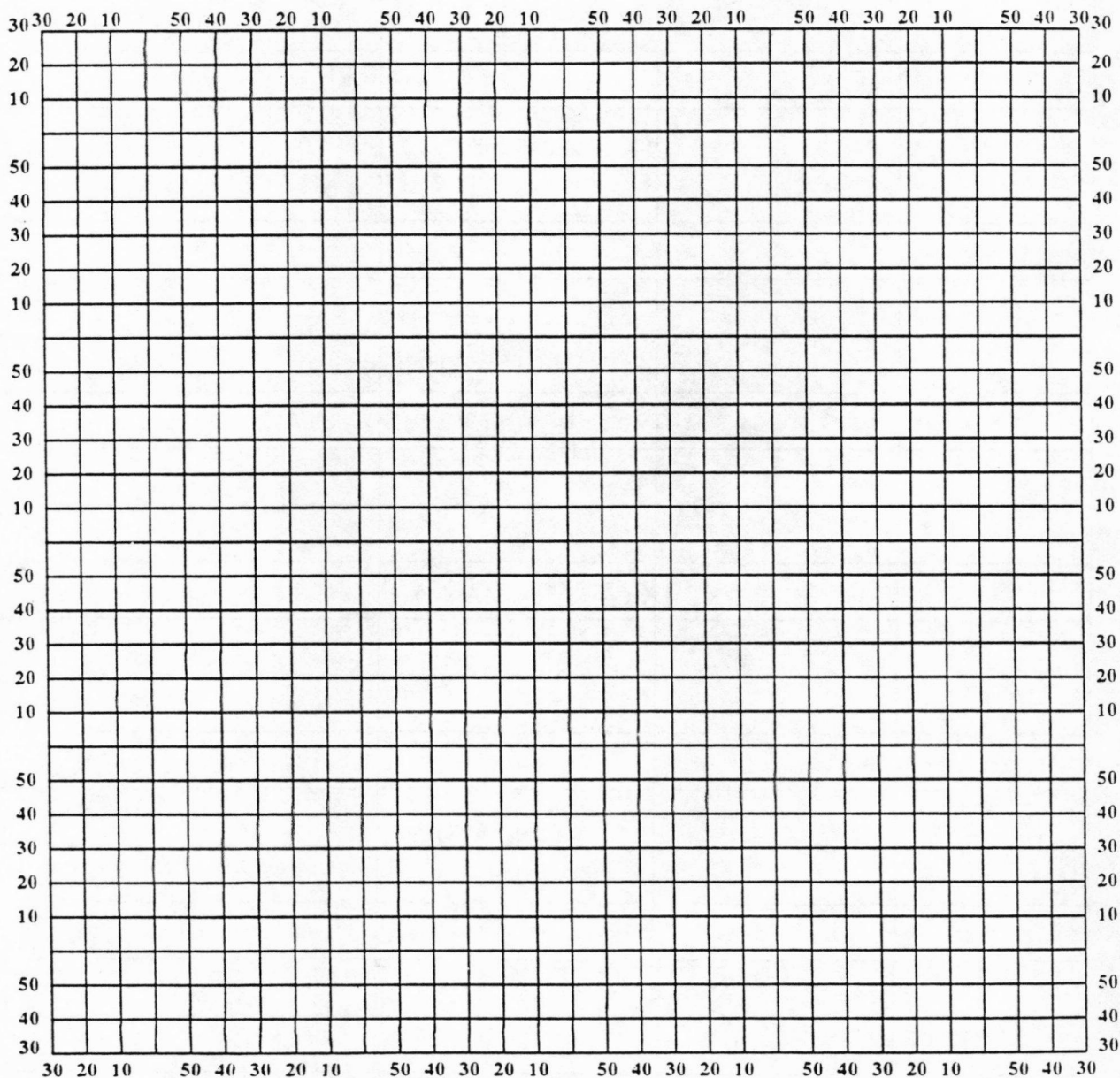
LPS Marley/Willis





True at 25° Latitude, in Degrees and Minutes of  $\phi$  and  $\lambda$ .

Date \_\_\_\_\_ Longitude \_\_\_\_\_ Observer \_\_\_\_\_



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

Date 8/7/91 Flight 910807II LPS Manly Withers

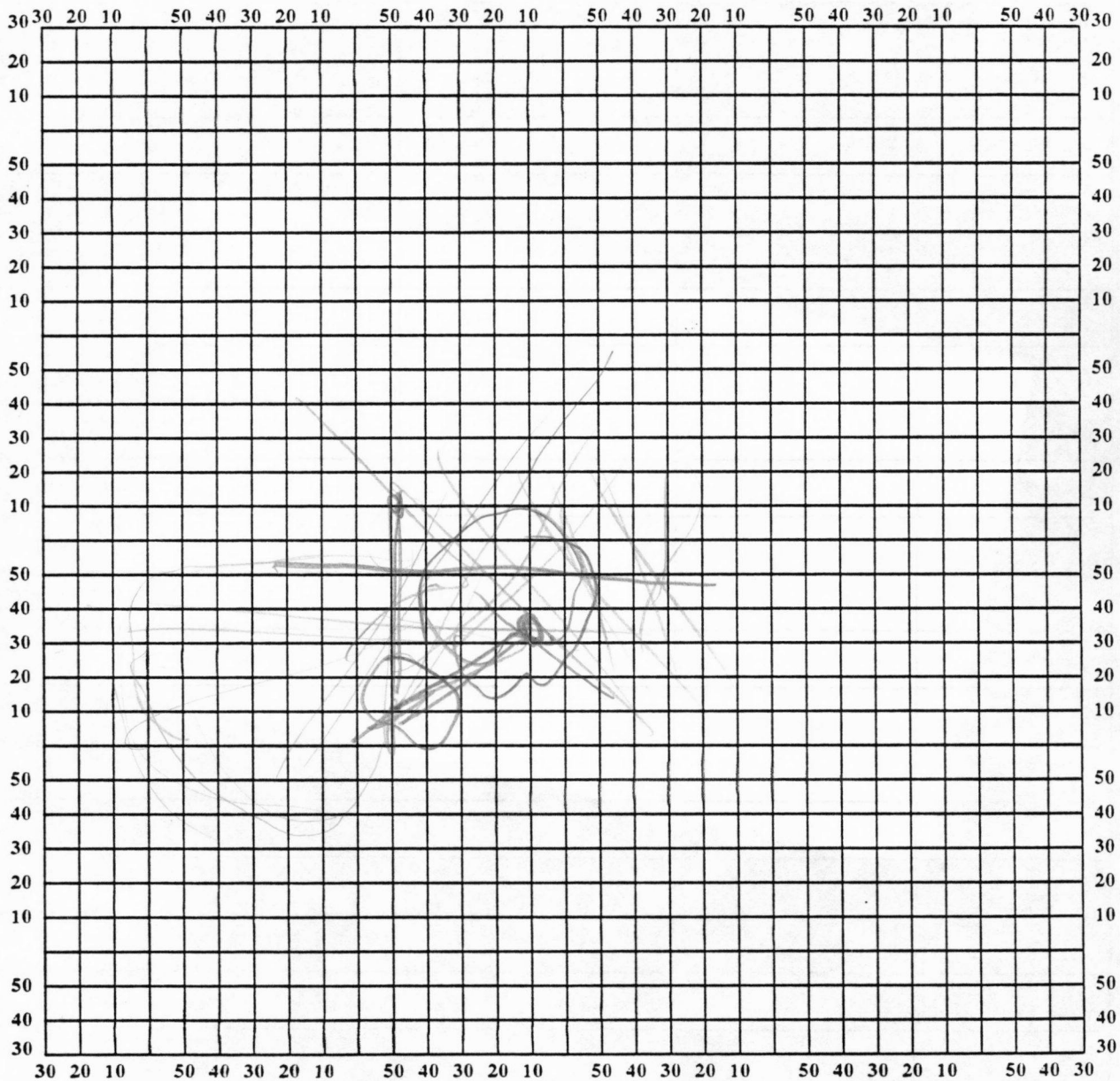
[illegible]



## Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of  $\phi$  and  $\lambda$ .

Date \_\_\_\_\_ Longitude \_\_\_\_\_ Observer \_\_\_\_\_



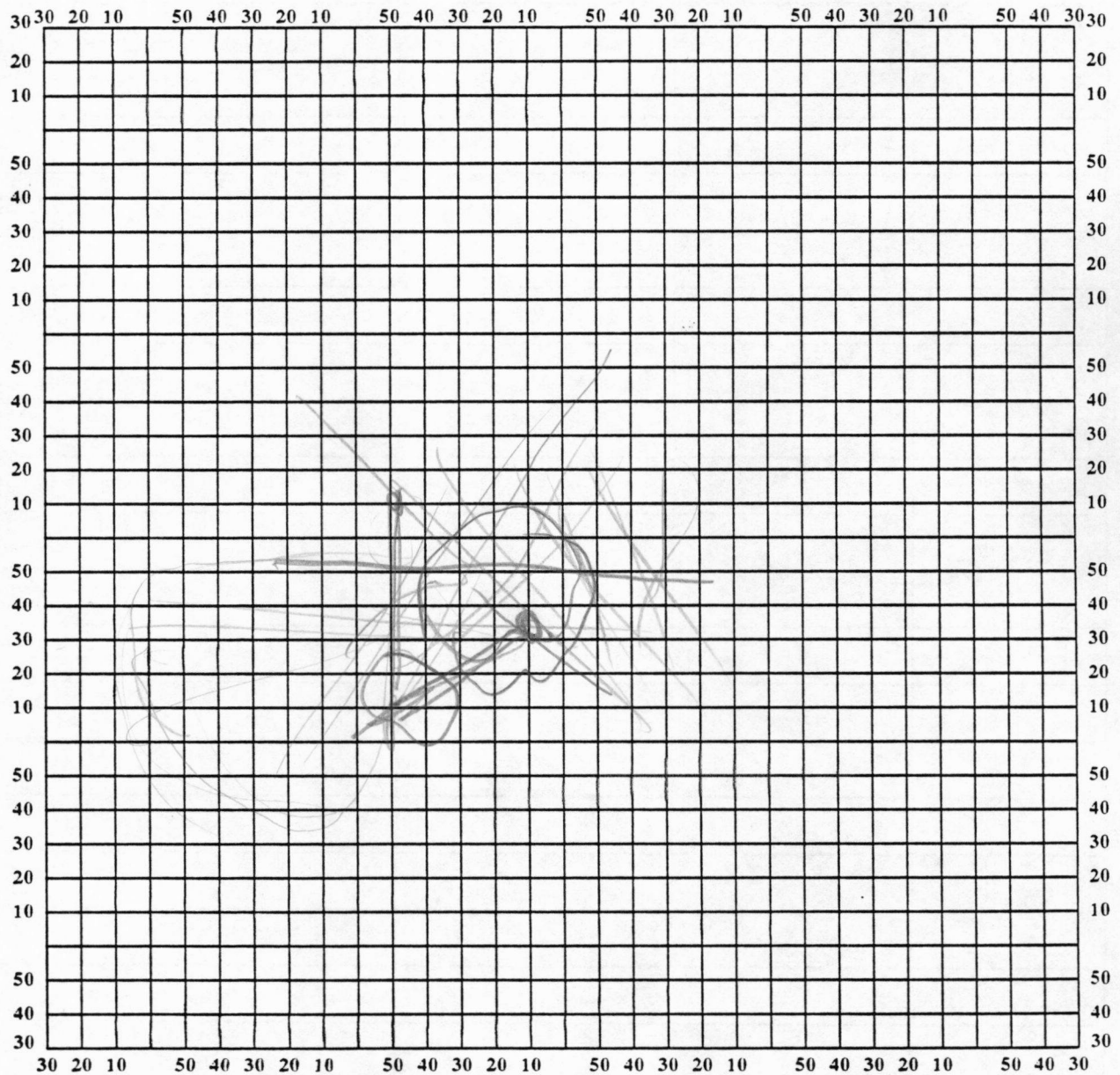
Note: Label full degrees according to location of flight area.

## Lead Project Scientist Event Log

## Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of  $\phi$  and  $\lambda$ .

Date \_\_\_\_\_ Longitude \_\_\_\_\_ Observer \_\_\_\_\_



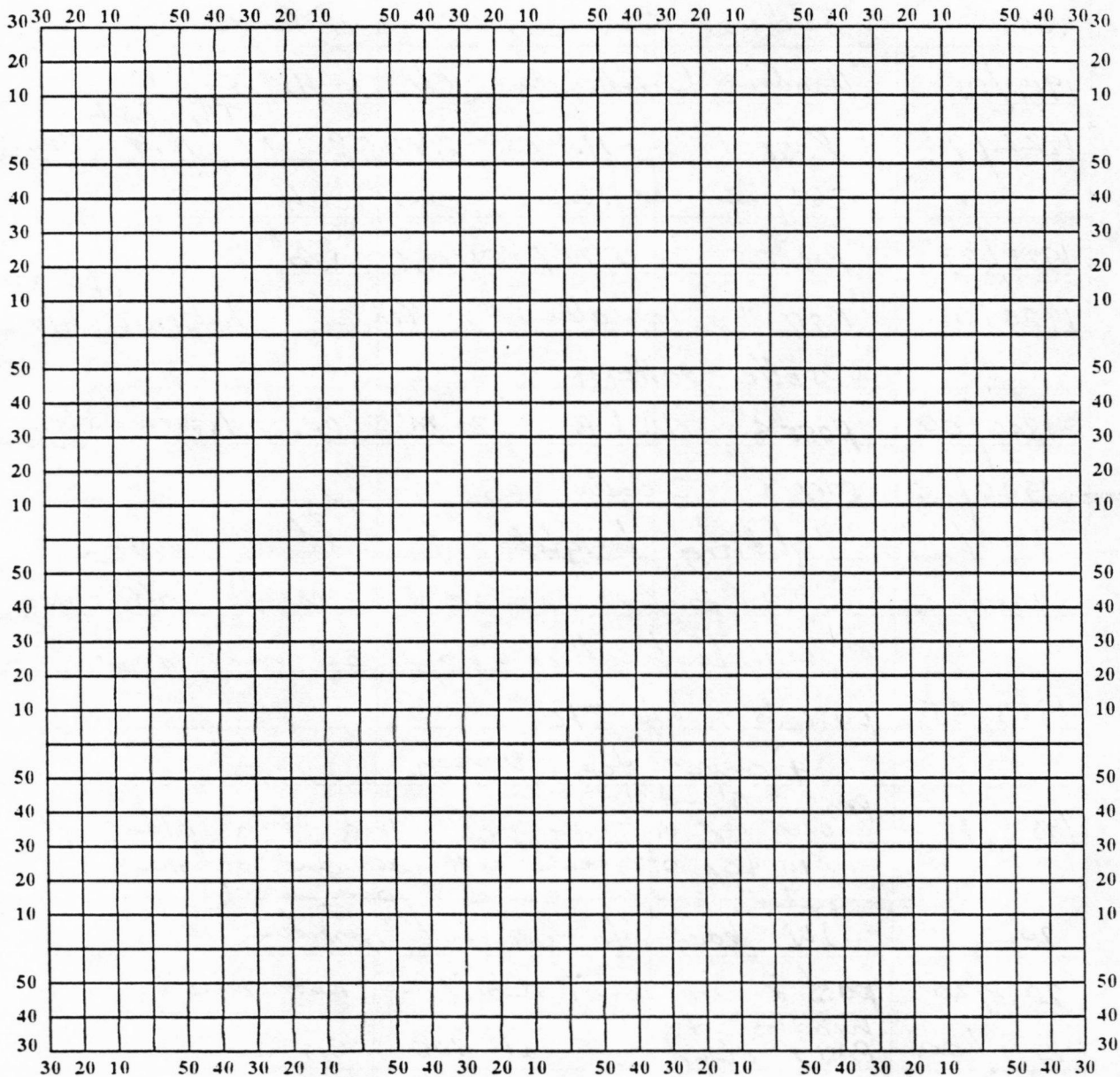
Note: Label full degrees according to location of flight area.

## Lead Project Scientist Event Log

## Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of  $\phi$  and  $\lambda$ .

Date \_\_\_\_\_ Longitude \_\_\_\_\_ Observer \_\_\_\_\_



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



Lead Project Scientist Event Log

Date 8/07/91 Flight 910807 I I LPS Marks/Willis

| Time    | Event                                    | Position                | Comments                    |
|---------|------------------------------------------|-------------------------|-----------------------------|
| 1856    | good CB's over south shore of lake       |                         |                             |
| 1919/05 | Heading to Alligator CB.                 | -11.4°C                 |                             |
| 1922/10 | PASS 1                                   | -11.1°C 28/15.8 81/18.9 | TAJ 284 HDG 301             |
|         | 267/24 Melba - next cell                 |                         |                             |
| 1928/29 | PASS 2                                   | 28/21.1 81/19.6         | 130°                        |
| 1934/00 | PASS 3 new cloud                         | -11.1°C                 | lightning hit off nose beam |
|         | rosette pattern                          |                         |                             |
| 1940/00 | PASS 4 cloud B                           | 20 m/s up.              | lightning strike entering.  |
| 1946/34 | PASS 5 2 cells                           |                         |                             |
| 1948/00 | lightning bright to left of nose.        |                         |                             |
| 1952/40 | JW comp moved from M to other peg        |                         |                             |
|         | will look at it now on next pass         |                         |                             |
| 1953/45 | PASS 6                                   | hdg 210                 |                             |
|         | former tape broken                       |                         |                             |
| 1959/47 | PASS 7 cloud B                           |                         |                             |
|         | over top of new cell and thru older cell |                         |                             |
|         | in top of weak cell on end of pass       |                         |                             |
|         | descended to 135 to do rain work.        |                         |                             |
| 2012    | JW back to original position             |                         |                             |
| 2018/20 | PASS 8 in gravel debris -                | not much                |                             |
| 2111/00 | heading to PASS 9 cloud C                | at 100                  | 9.5°C                       |
| 2114/30 | PASS 9 cloud C                           | 9.6°C 26/2.6 29 49.7    | TRK 142                     |
|         | PASS 10 cloud C                          | reverse of above        |                             |

2120/30 set<sup>JW</sup> comp full clockwise then reset zero for next pass  
pass 11 cloud C Hdg 185 then back to MIA  
little cells to W good updraft

2127 Heading back to MIA  
2128 back to MIA comp to reverse JW

125  
51

433  
446

871