

19890915HI - LPS

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

- JM 1. Participate in general mission briefing.
- JM 2. Determine specific mission and flight requirements for assigned aircraft.
- JM 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.
- JM 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Arrange ground transportation schedule when deployed.
 - c. Determine equipment status.
- JM 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.
- JM 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 9/15/89 Aircraft 42RF Flight ID 890915H1

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Marks</u>	Flight Director	<u>Masters</u>
Cloud Physics	<u>P. Black</u>	Pilots	<u>Genzlinger, McKim</u>
Radar	<u>P. Dodge</u>	Navigator	<u>White</u>
Doppler	<u>B. Burpee</u>	Sys. Engr.	<u>Wode</u>
Photographer		Data Tech.	<u>Goldstein</u>
Omegasonde	<u>H. Willoughby</u>	El. Tech.	<u>Schriber</u>
AXBT/AXCP		Other	<u>Rain</u>

Take-Off	Location	Landing	Location
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B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>9/15/10Z</u>	<u>14.1</u>	<u>52.8</u>		<u>105 kts (sat.)</u>
<u>12Z</u>	<u>14.3</u>	<u>53.3</u>		<u>105 kts</u>
<u>9/15-18Z</u>	<u>14.4</u>	<u>54.6</u>		<u>280/13 kts</u>

C. Mission Briefing

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>

REMARKS:

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

see attached sheets Patterns I-IV

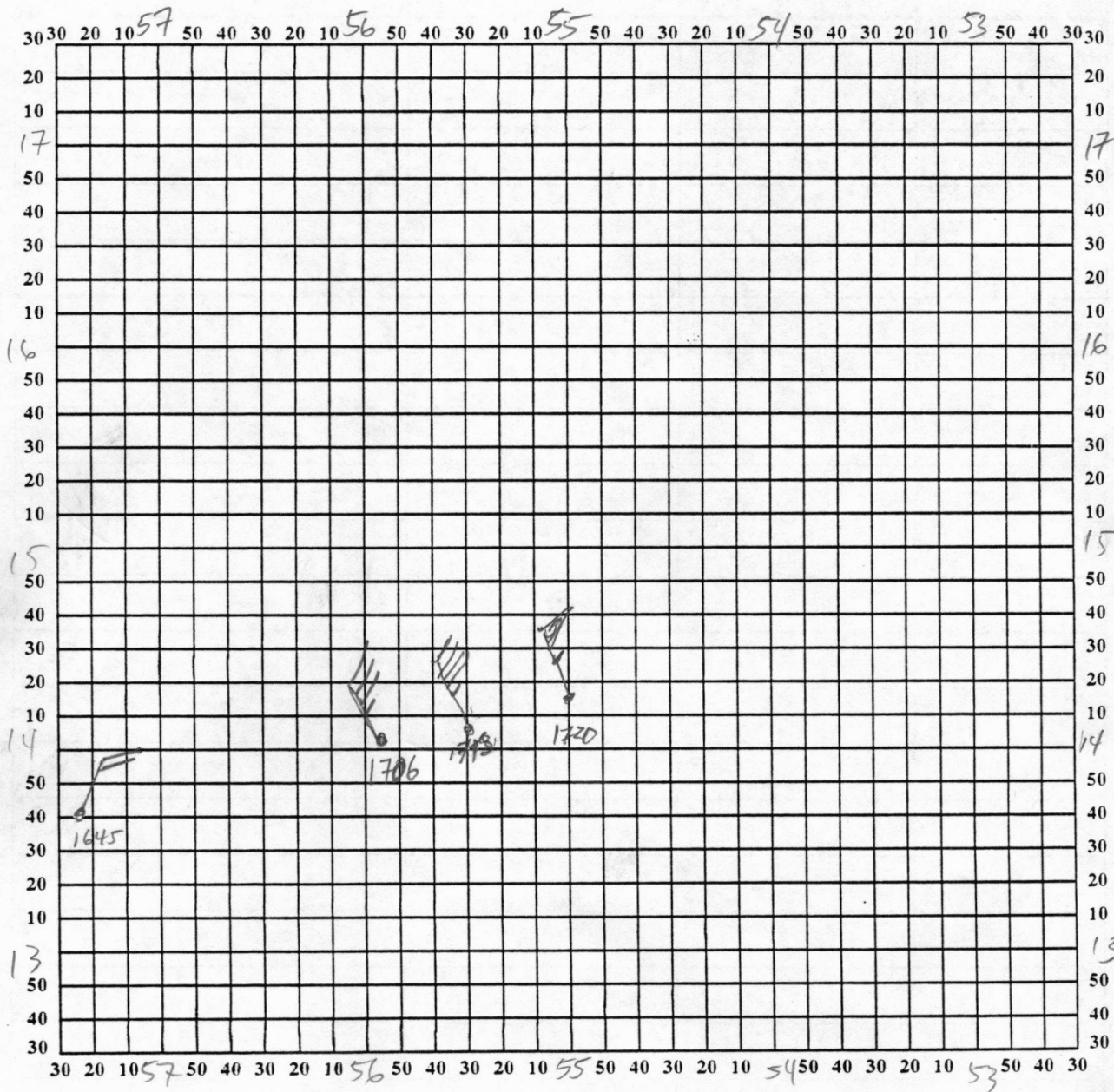
E. II. Actual Flight Pattern

Hurricane Recco Plotting Chart

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

1

Date 9/15/89 Longitude 890915H Observer Marley
Hugo



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

Lead Project Scientist Event Log

Date 890915HI

Flight 9/15/89
Hugo

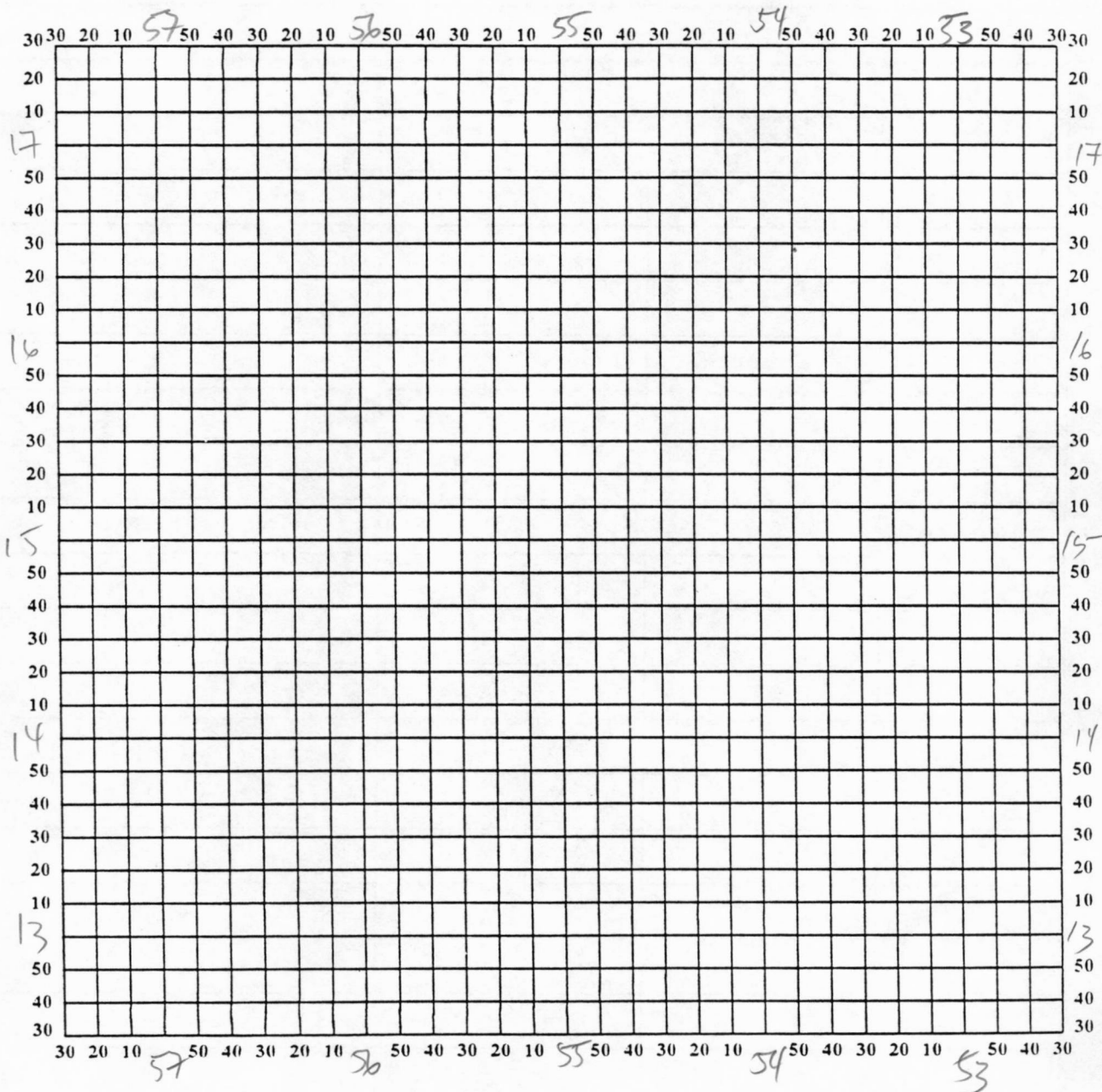
LPS Manly

[illegible]

Hurricane Recco Plotting Chart

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

Date 9/15/89 Longitude Hugo 890915H1 Observer Manly



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

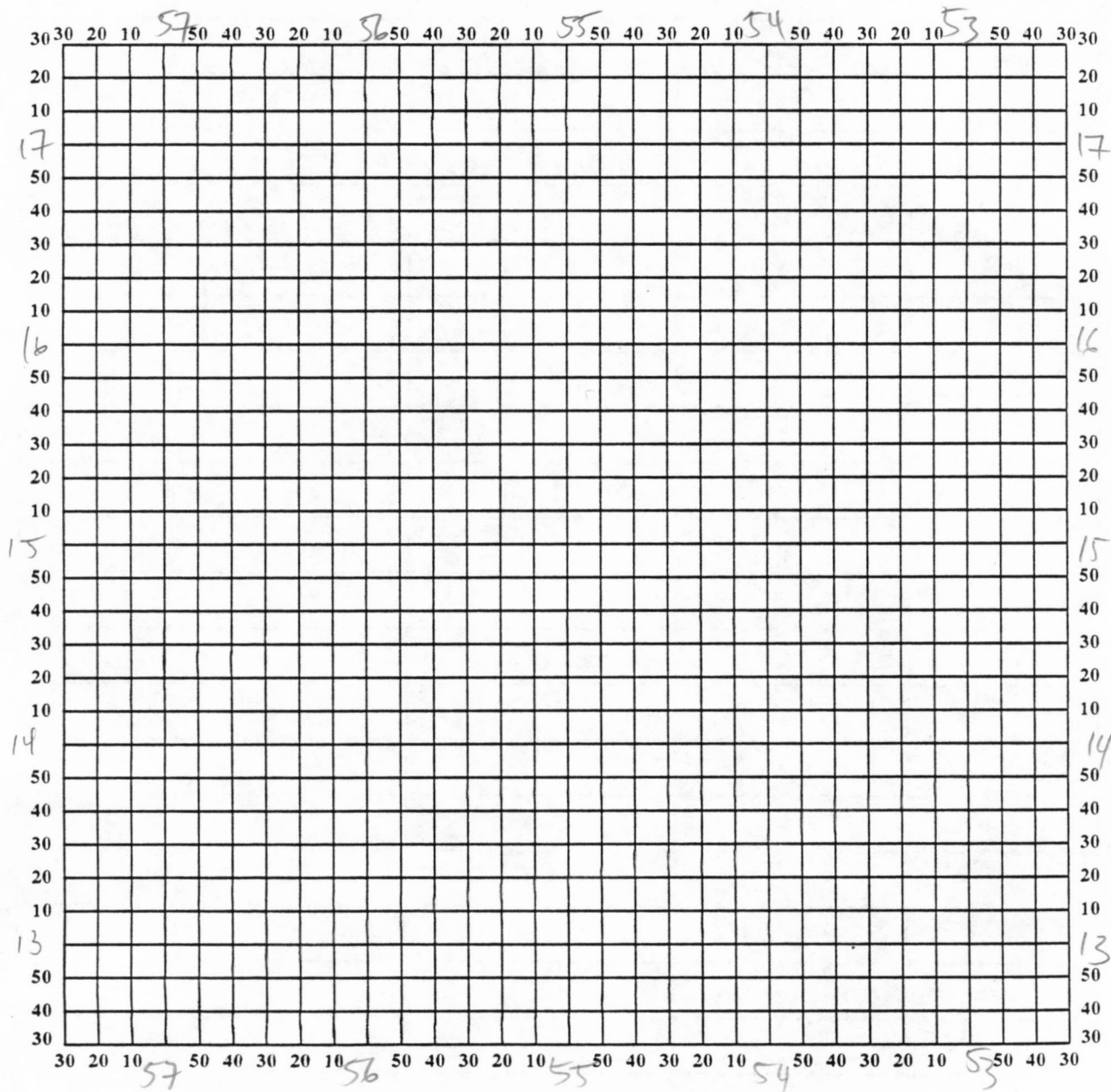
Date 9/15/89 Flight 890915H1 LPS Manley
Hugo

[illegible]

Hurricane Recco Plotting Chart

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

Date 9/15/89 Longitude ^{Hugo} 8909 ~~15~~ 11 Observer Manley



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

Lead Project Scientist Event Log

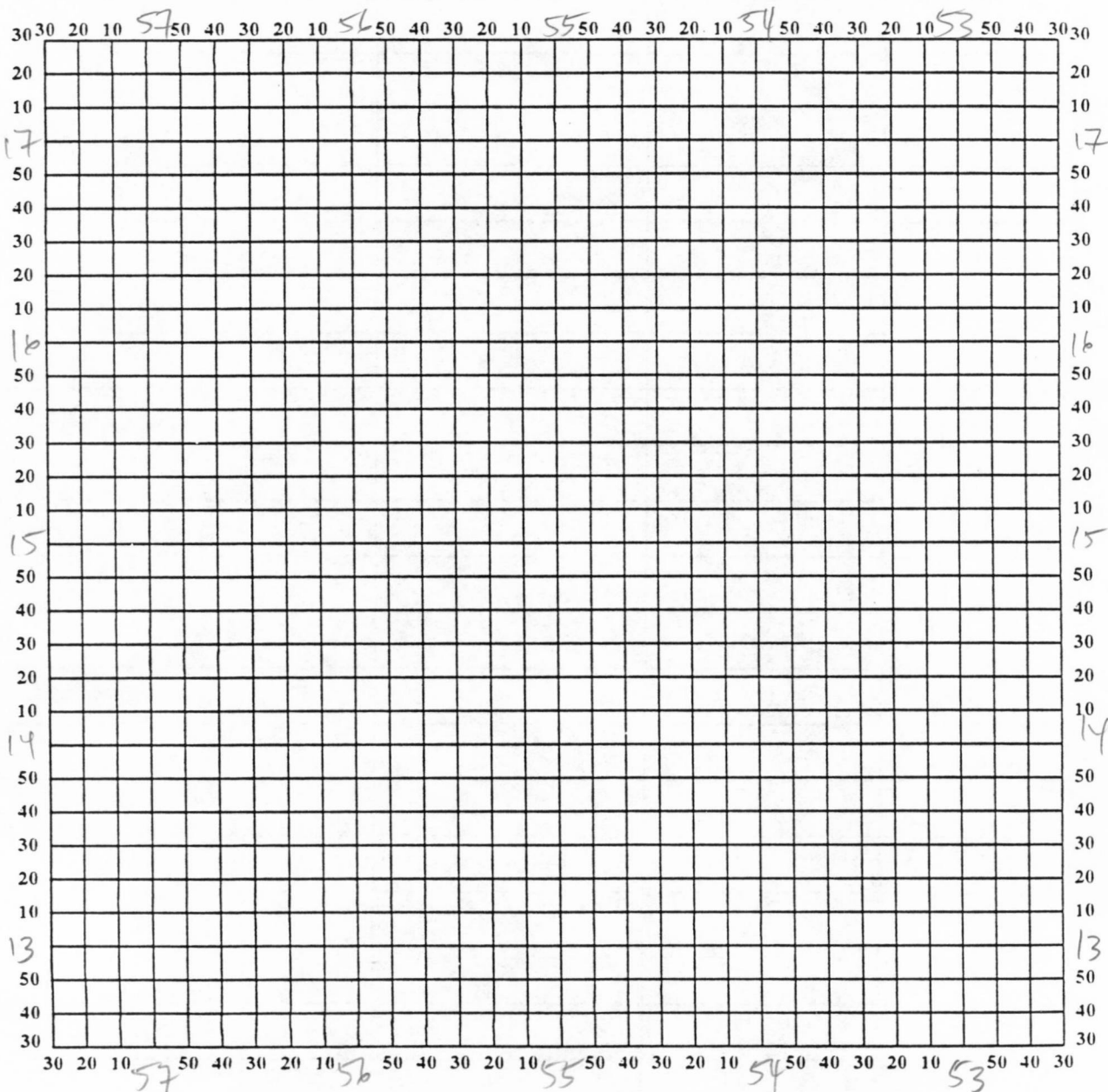
Date 9/15/89 Flight 890915H1 LPS Marler
Hugo

[illegible]

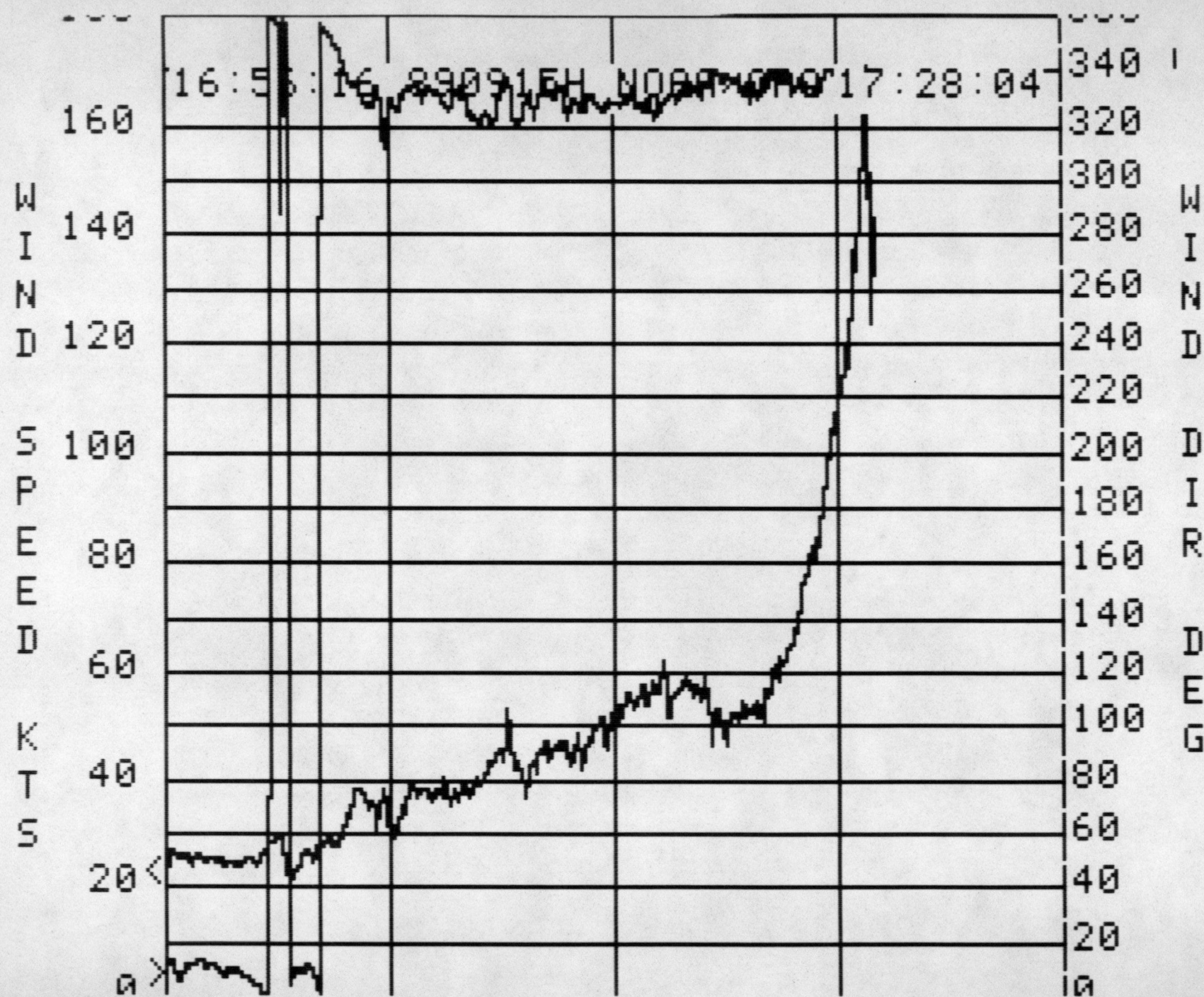
Hurricane Recco Plotting Chart

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

Date 9/15/89 Longitude 890915H1 Observer Mark



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

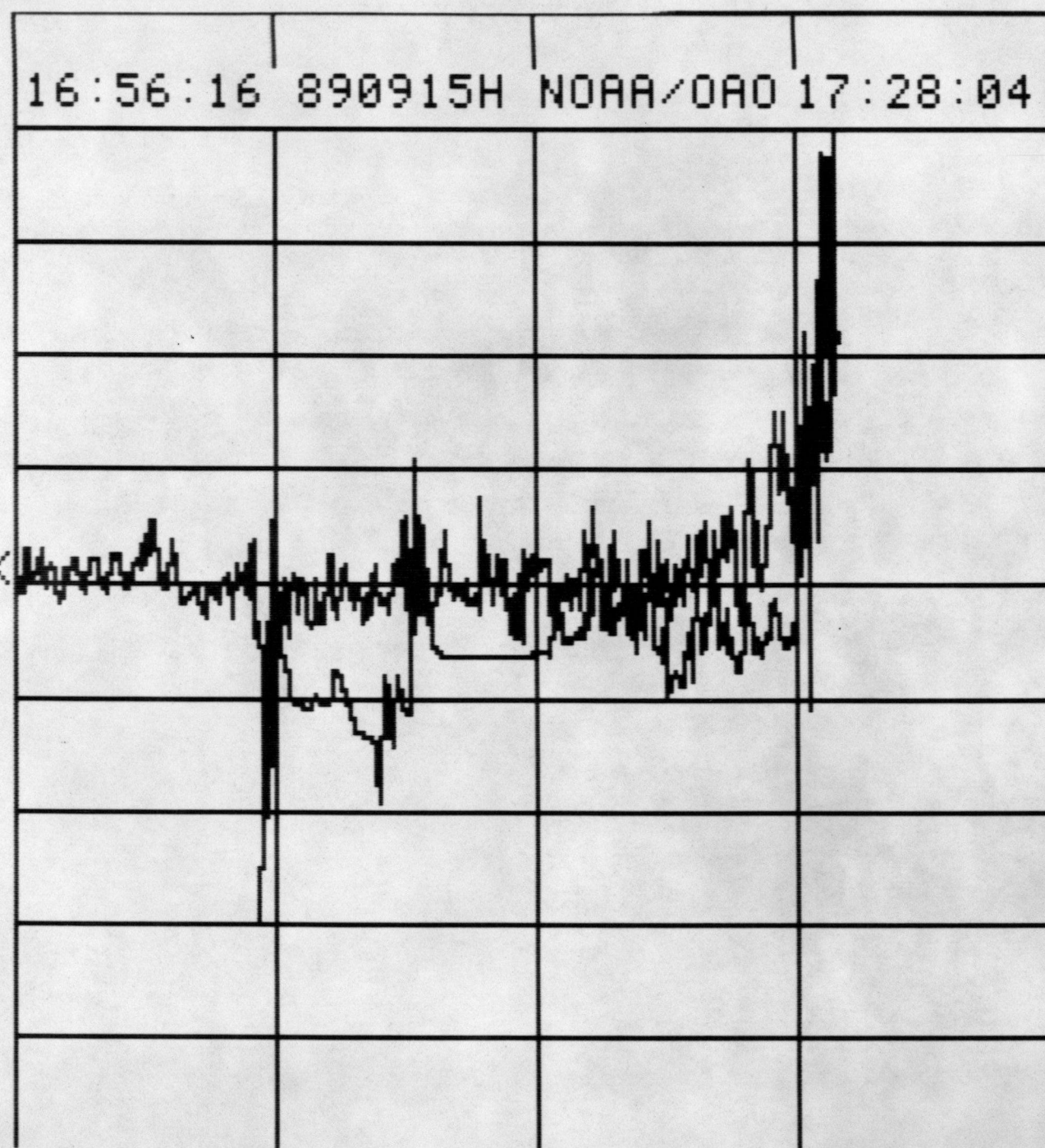


16:56:16 890915H NOAA/OAO 17:28:04

JW#1:

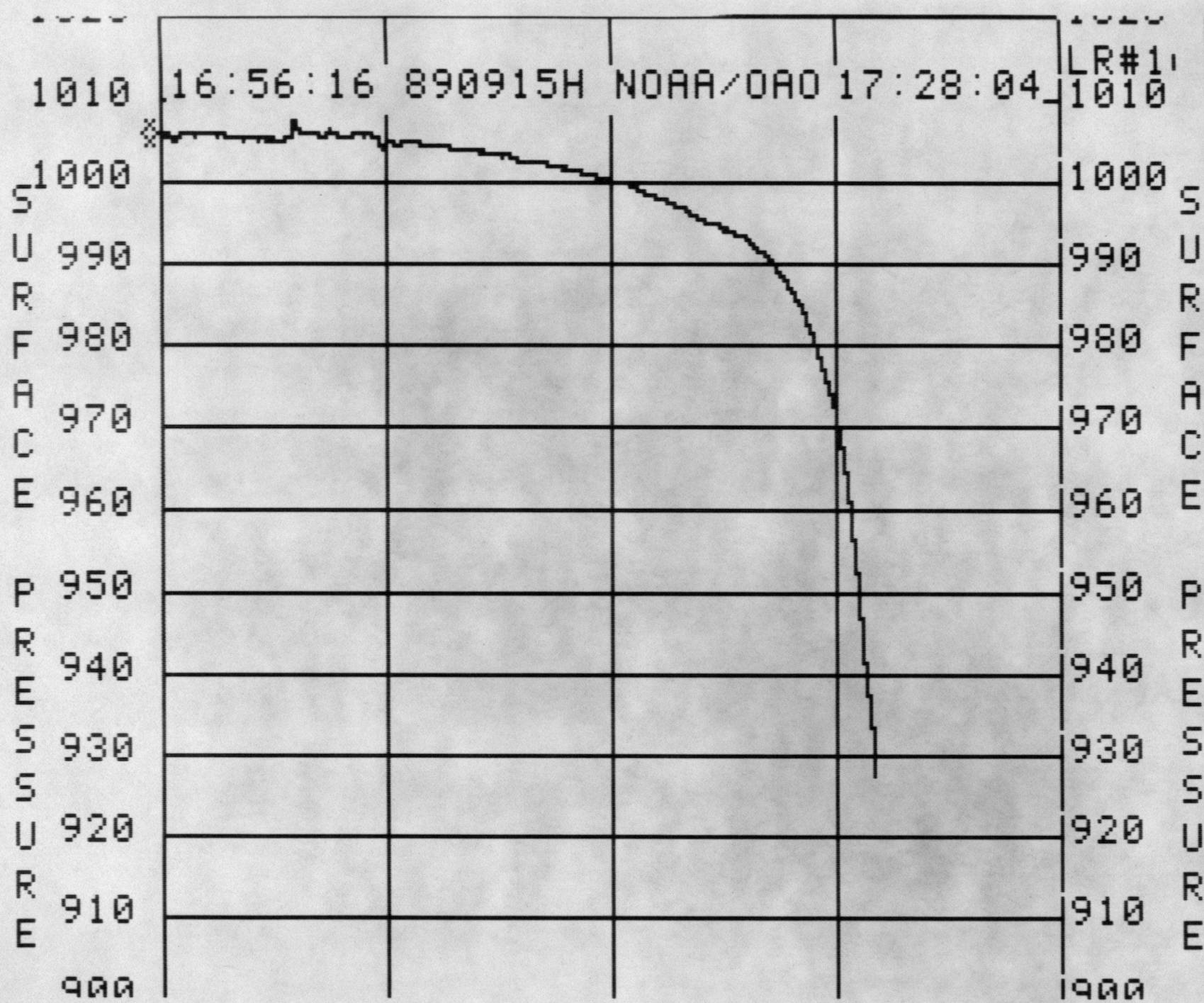
VERT
WIND
M/S

8
6
4
2
0
-2
-4
-6
-8
-10

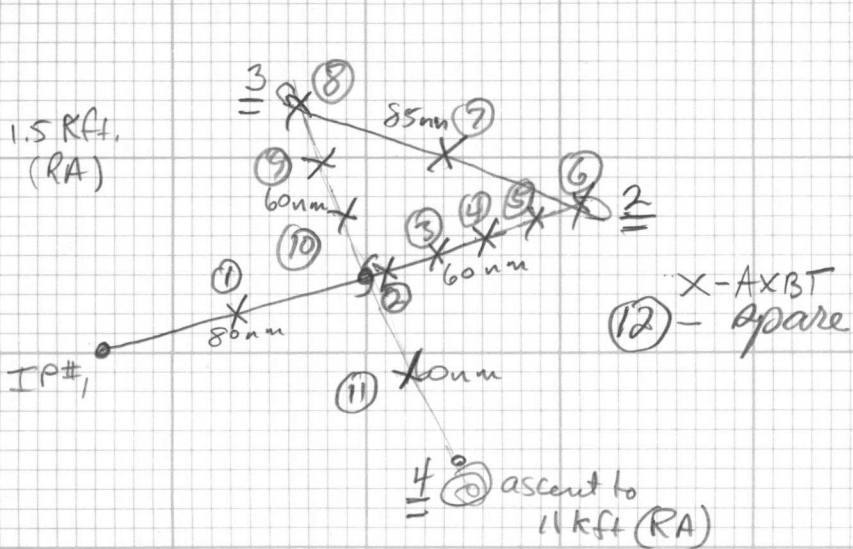


7
6
5
4
3
2
1
0
-1
-2

L
I
Q
H
2
0
*
1
0
G
/
C
U
M

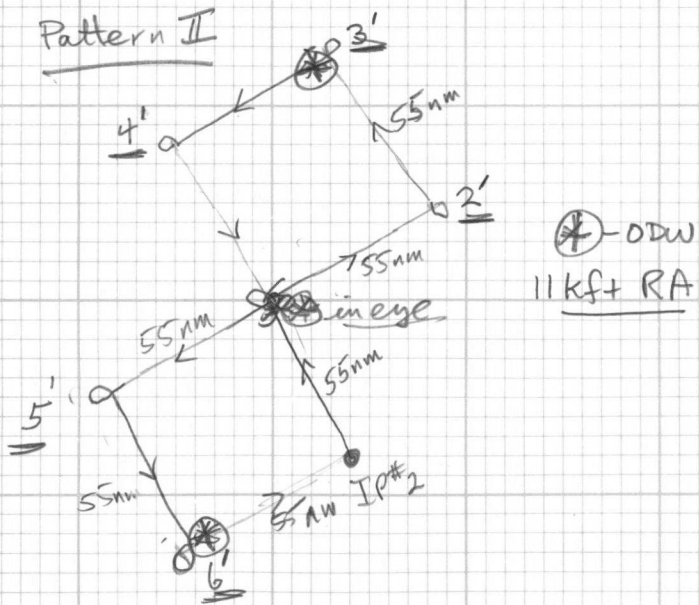


Pattern I



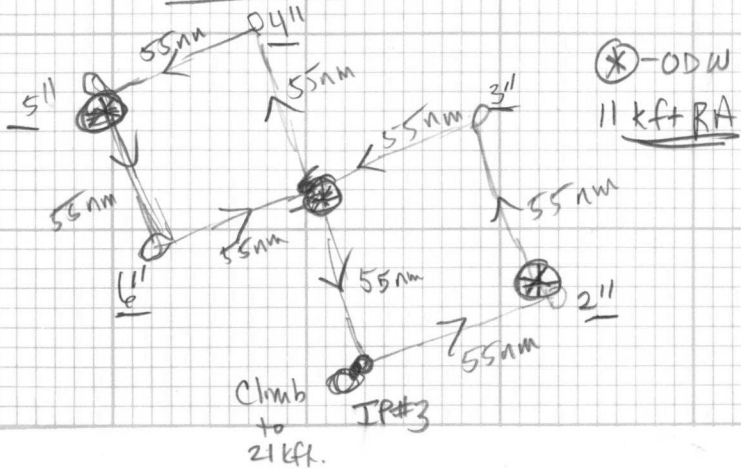
<u>leg length</u>	<u>time</u>	<u>Σ</u>
350 nm	1.5 h	1.5 h

Pattern II



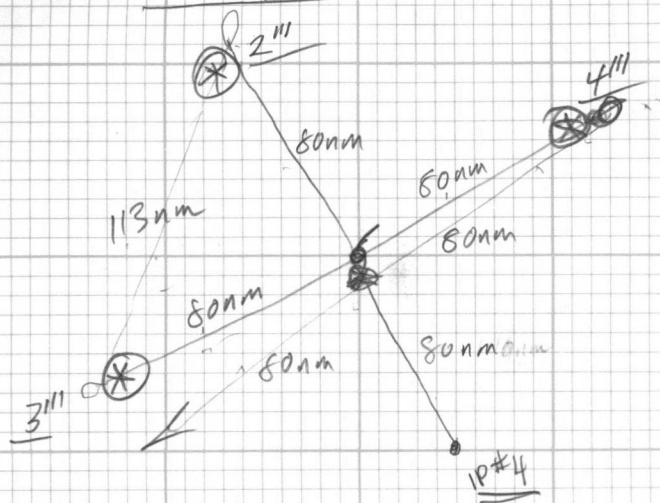
44nm ~ 2h 3.5h

Pattern III



440mm ~2h 5.5h

Pattern IV



leg length

time

Σ
(5.5h)

21 + kft

593nm

2.5h

8.0