E.1 Lead Project Scientist (On-Board)

The on-board lead project scientist is responsible for carrying out the scientific mission of his assigned aircraft. (Check off and initial when completed.)

E.1.1 Preflight

_____ 1. Participate in general mission briefing.

_____ 2. Determine specific mission and flight pattern(s) for his aircraft.

_____ 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with RFC 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 RFC flight crew 90 minutes before takeoff, provide copies of flight plans and give a formal briefing to the flight director, navigator, and pilots.

_____ 6. Report status of aircraft, systems and crews to appropriate HRD operations center.

E.1.2 In-Flight

_____ 1. Confirm from RFC flight director/meteorologist that satellite data link is operative (information).

_N/A_ 2. Confirm camera mode of operation.

_____ 3. Confirm data recording rate.

_____ 4. Complete form E-1.

59

7 CDPHY
5 RADAR
2 VCR

E.1.3 Postflight

_____ 1. Debrief crew.

_____ 2. Report landing time, aircraft, crew and mission status to HRD operations center.

__HJW__ 3. Gather completed forms for mission and turn in at the operations center.

_____ 4. Determine next mission status, if any, and brief crews as necessary.

_____ 5. Notify operations center as to where you can be contacted.

MISSION #0407 DEAN

On-board Lead Project Scientist Checklist

DATE **29 SEP**   AIRCRAFT **42**   FLT **830929H**

A. Participants

CONNOR / GENZLINGER

Function	Participant	Function	Participant
Lead Proj. Sci.	WILLOUGHBY	Gust Probe	
Cloud Physics	BOGERT	Omegasonde	
AXBT		Sys Eng	
Hot Film		Data Tech	
Radar	MARKS/KOHLER/FARR	El Tech	
Flt Dir/Met	PARRISH	Other	

Take Off **29 0640Z** Location **MIA**   Landing   Location

910   5   220

B. Past and Forecast Storm Position

Date	Time	Latitude	Longitude	MSLP
29	0341Z	34.6	71.2	1000/55 KT
29	0900Z	35.1	71.8	"
	SEE EVENT LOG			

C. Mission Briefing

FLY TWO ROTATING 4'S EET 09, 12, 15Z

(100 MI LEES)

AVOID RESTR AREA.

D. Equipment Status

Equipment	Pre Flt	In Flt	Post Flt	Reports Collected
Aircraft	I⊕	↑	↑	HiℓW
Radar	℔W	↑	↑	HℓℓW
Cloud Physics	HiℓW	↑	↑	H℔W *
Data Sys	H℔W	↑	↑	
Omegasondes	NOB			
AXBT	NOB			
Gust Probe	NOB			
Hot Film	NOB			
Photography	N/A			

REMARKS CLD PROBE ↓
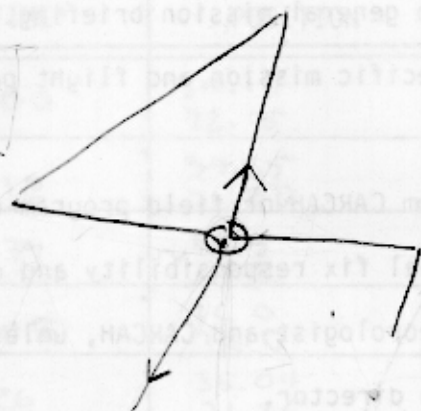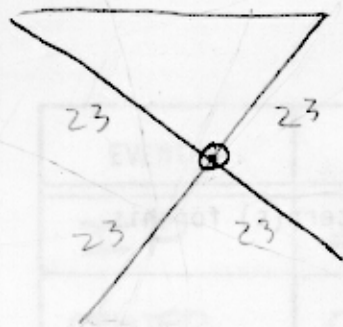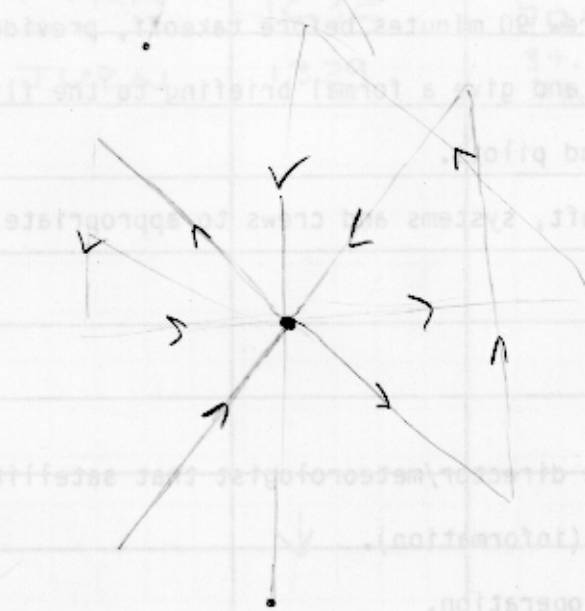
E.1 Lead Project Scientist (On-Board)

The on-board lead project scientist is responsible for carrying out the scientific mission of his assigned aircraft. (Check-off and initial when completed.)

Lead Project Scientist Event Log

E.1.1. Preflight

1. Participate in general mission briefing.

2. Determine specific mission and flight pattern for his aircraft.

3. Determine from CANCAR and field program director whether another aircraft has operational fix responsibility and discuss with his flight director/meteorologist and CANCAR, unless briefed otherwise by field program director.

a. Contact RMD members of crew to:

b. Assume availability for mission.

b. Arrange ground transportation schedule when deployed.

c. _____ operative equipment status.

5. Meet with RMD (flight crew 30 minutes before takeoff), provide copies of flight plans and give a formal briefing to the flight director, navigator, and pilot.

6. Report status of aircraft, systems and crews to appropriate RMD operations center.

E.1.2. In-Flight

1. Confirm from AFC 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-1.

*Log times of significant altitude changes, turns, and eye fixes (eye exit and eye entrance), center position, etc.

23   23
23   23

9^2
2^2
119

$\dfrac{8}{3}$
11.7
$\dfrac{2}{9.7}$
100
$\overline{1000}$

100

125
125
125
1375

N/A

E. Proposed and Actual Flight Patterns
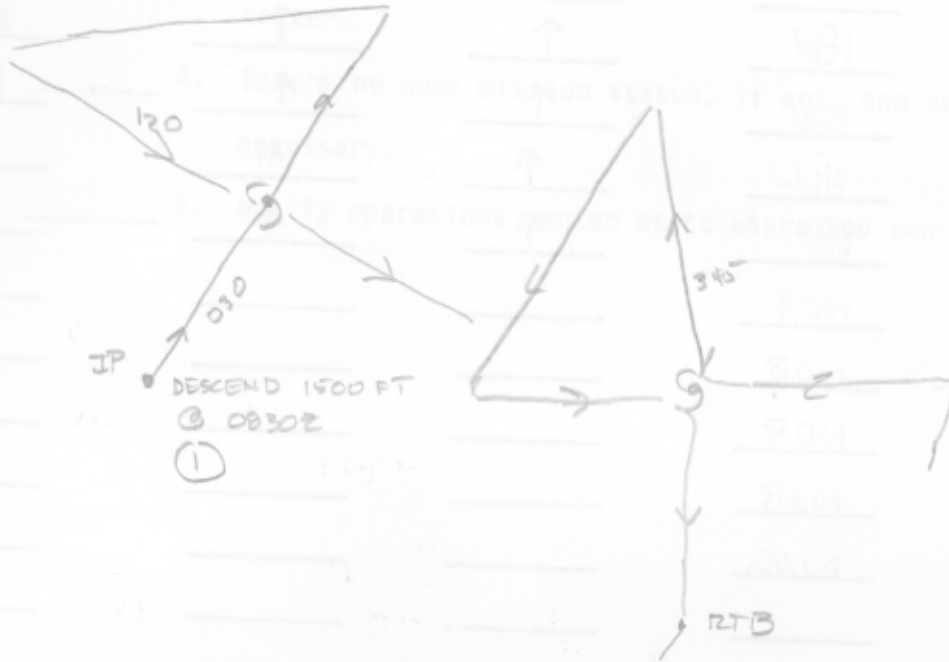
HURRICANE RECCO PLOTTING CHART

TRUE AT 25° LATITUDE, IN DEGREES AND MINUTES OF ϕ AND λ

LATITUDE
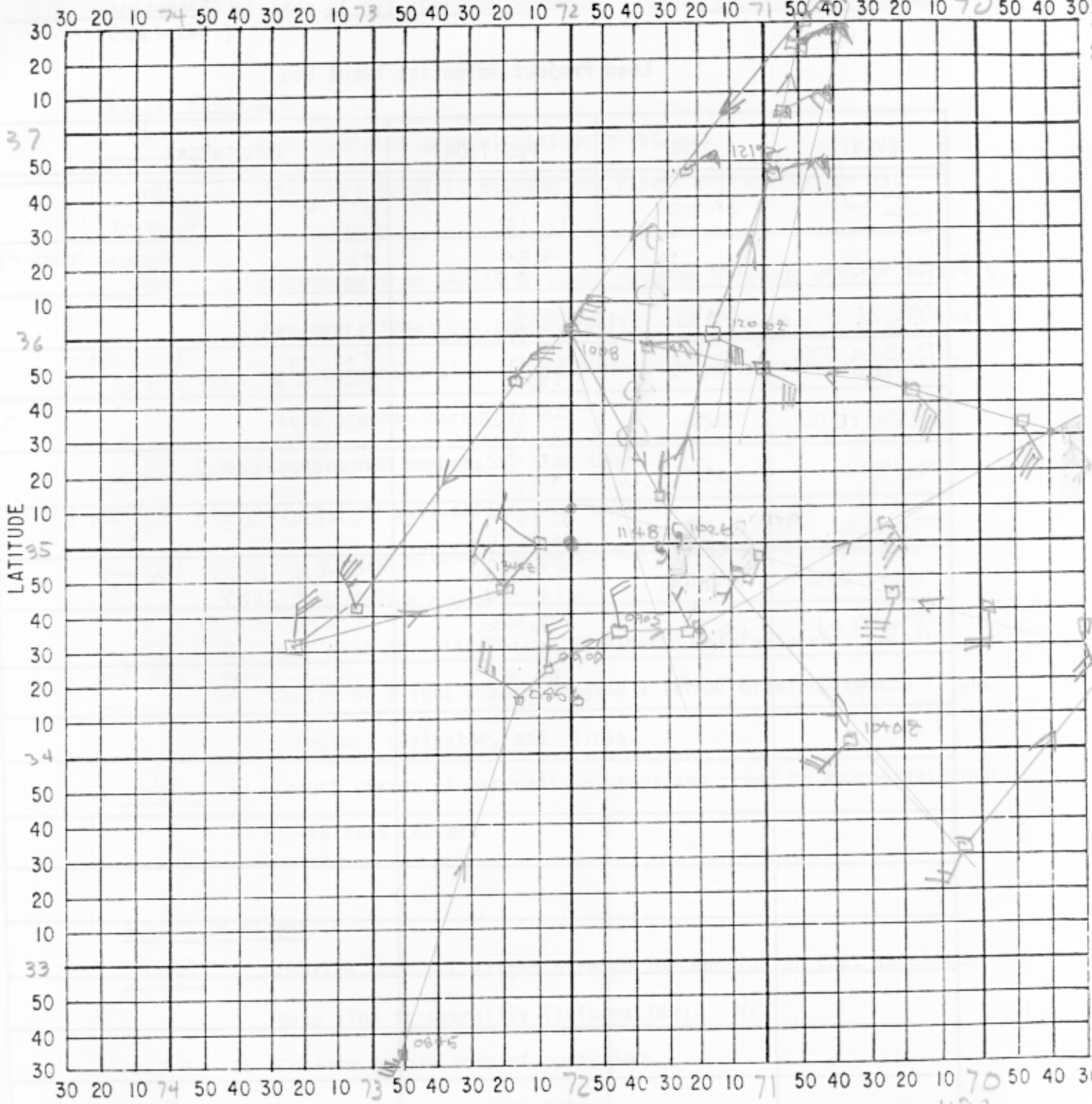
LONGITUDE

DATE 29 SEP 03   OBSERVER H&W

NOTE: Label full degrees according to location of flight area   1352   35 18 72-00

DATE 29 SEP 83   FLIGHT 830929 H   LPS WILLOUGHBY

Lead Project Scientist Event Log

EVENT	TIME*	POSITION	COMMENTS**
IP	0900	34.15 72.15	AT 1500 FT (CLEARENCE SLOW!!)
CENTER	0912	34.55 71.20	TOPS IN EYEWALL 2000FT 1007 SLP
TURN 187	0939	~35.5 69.7	
TURN TO 148	1008	36.0 72.0	IN COOL AIR AHEAD OF FRONT →
CENTER	1026	35.04 71.25	
TURN	1057	33.52 70.02	TRACK 040
TURN	1115Z	34.47 69.13	TRACK 287 TO →
CENTER	1148Z	34.96 71.52	TRACK 015 → MIN SLP 1007
TURN	1232	37.46 70.75	TURN 220
TURN	1329	34.55 73.35	TURN 070 →

*Log times of all significant altitude changes, turns, and eye fixes
**New altitude, heading, center position, etc.

65

TIME (HRMNSC)

LONGITUDE W

LATITUDE N

DEAN

830929H

LONGITUDE W