19850830I2 -LPS

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).

___ 2. Confirm camera mode of operation.

___ 3. Confirm data recording rate.

___ 4. Complete form E-1.

Form E-1
Page 1 of 5

On-board Lead Project Scientist Checklist

DATE 30-31 AUG 85 AIRCRAFT N43RF FLT 850830I2

A. Participants

Function	Participant	Function	Participant
Lead Proj. Sci.	WILLOUGHBY	Gust Probe	
Cloud Physics	GRIFFIN	Omegasonde	
AXBT		Sys Eng	DUGRANRUT/SCHROOR
Hot Film		Data Tech	
Radar	GAMMACHE, LEIGHTON	El Tech	
Flt Dir/Met		Other	

Take Off 31/0009 Location MIA Landing 31/0954 Location MIA

B. Past and Forecast Storm Position

Date	Time	Latitude	Longitude	MSLP
30 AUG	2222	28° 23'	86° 25'	

C. Mission Briefing

FLY ROTATING FOURS, GET 0130, 0300
0430, 0600, 0730, 0900 FIXES.

E.1.3 Postflight

_____ 1. Debrief crew.

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

_____ 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.

Form E-1
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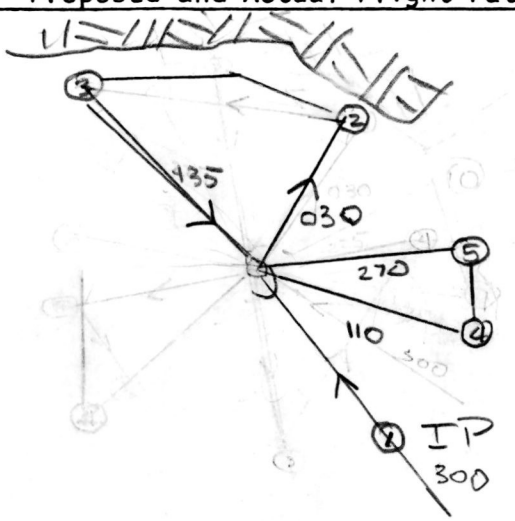
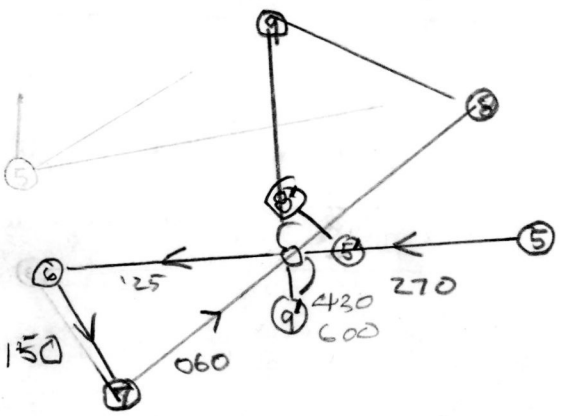
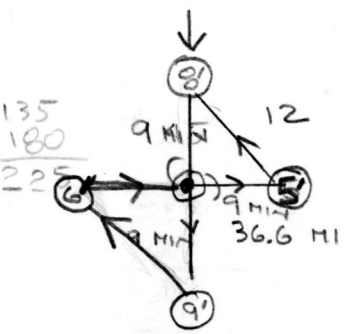
E. Proposed and Actual Flight Patterns



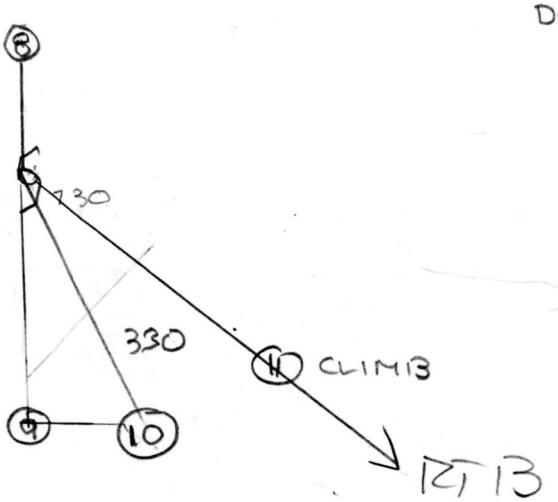
315
180
135





DOPPLER BOX

$\frac{1}{3.41}$ 30 =



D. Equipment Status

Equipment	Pre Flt	In Flt	Post Flt	Reports Collected
Aircraft [2]	↑	↑	↑	
Radar	LF ↑, TA ↓ [1]	LF ↓, TA ↑ [3]	LF ↓, TA ↑	
Cloud Physics	↑	↔ [4]	↔	
Data Sys	↑	↑	↑	
Omegasondes				
AXBT				
Gust Probe				
Hot Film				
Photography				
LPS	↓	↓		

REMARKS

[1] R/T BOX INFG

[2] ONE A/C UNIT ↓, CABIN HOT, EXPECT ELECTRICAL PROBLEMS

[3] LF ↓ SOMETHING FUNNY IN LOWER RADOM. CANIBALIZED PARTS TO GET TA ↑. USING NOSE FOR OPS.

[4] DISPLAY FLAKEY, PROB EASY TO FIX

Form E-1
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DATE 31 AUG 85 FLIGHT 850830I2 LPS WILLOUGHBY

Lead Project Scientist Event Log 1 of 2

EVENT	TIME*	POSITION	COMMENTS**
T/O	31/0089	MIA	
I/P	0110	27.71 84.0	POINT ① AT 5000'
6	0135	28.42 85.76	TRAK 030 6 → ② 130
③ TURN	0153	29.40 85.15	TRAK ALONG COAST 308 ② → ③
③ TURN	0220	30.24 87.32	TRAK 140 → 6
6	0257	28.50 85.63	978 MIN SLP TRAK 110 → ④ 300
④ TURN	0334	27.76 83.09	TRAK N TO ⑤
⑤ TURN	0346	28.63 83.16	TRAK E TO 6
6	0418	28.52 85.45	TRAK 270 → ⑥ MIN SLP 977 430
⑥ TURN	0458	28.66 88.61	TRAK 150 → ⑦
⑦ TURN	0516	27.42 87.90	TRAK 060 → 6 DATA SYS ↓ FOR A MINUETE
6	0556	28.64 85.25	TRAK 6 → 060 976
⑧ TURN	0619	29.45 83.79	TRAK → ⑨
⑨ TURN	0634	29.37 85.04	TRAK S → 6 START TAPE
6 TURN	0644	28.68 85.20	TURN E → ⑧' 976
⑨' TURN	0650	28.55 84.83	TRAK 315 → ⑨'
⑧' TURN	0656	28.86 85.07	TRAK S → 6
⑨' TURN	0707	28.29 85.23	TRAK NW → ⑥'
⑥' TURN	0713	28.58 85.51	TRAK E → 6
6 TURN	0719	28.70 85.16	TRAK S 6 →

DOPPLER "BOX"

45 37 3

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

DATE 30-31 AUG 85 FLIGHT 850830I2 LPS WILLOUGHBY

Lead Project Scientist Event Log

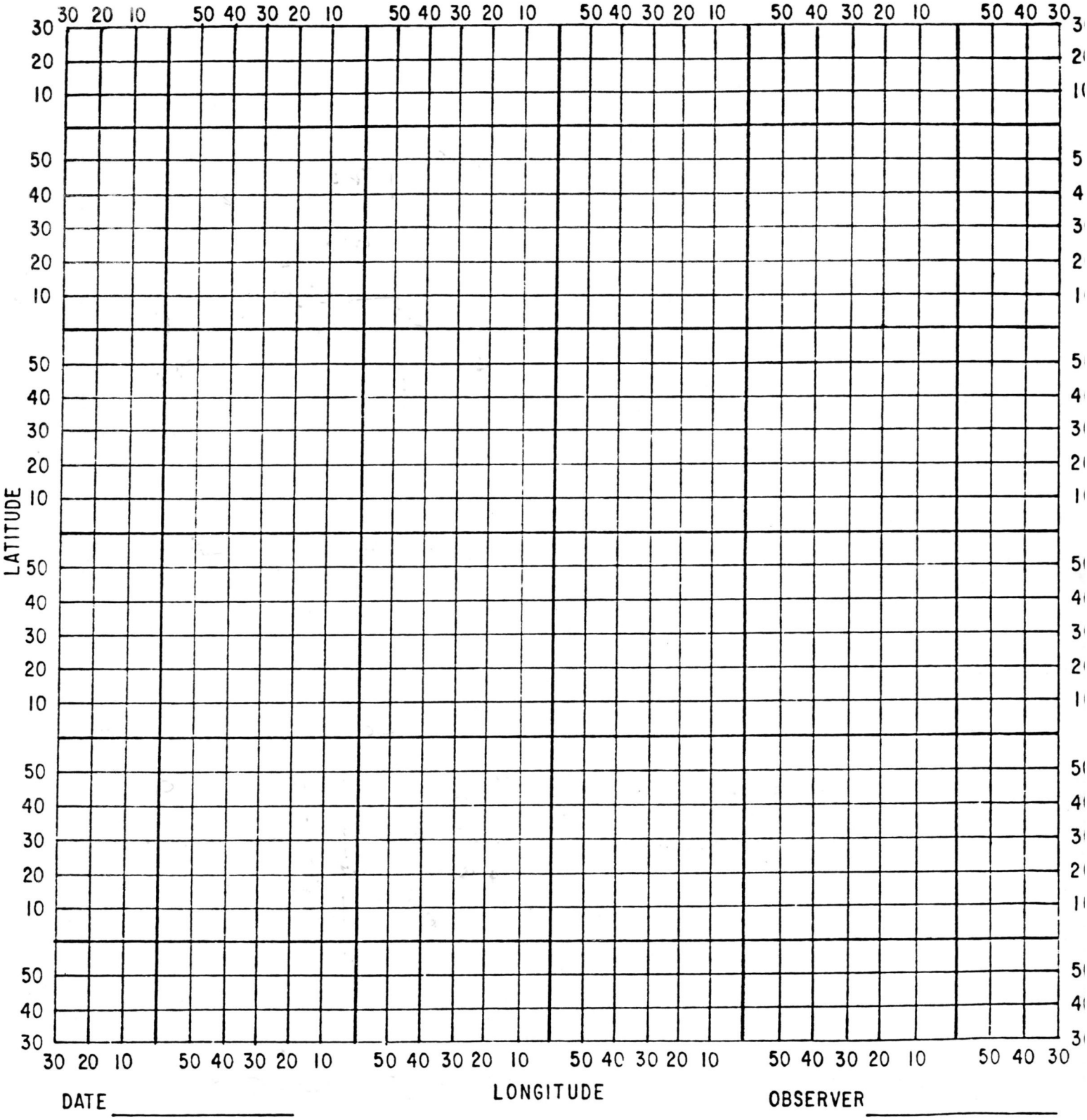
2 of 2

EVENT	TIME*	POSITION	COMMENTS**
TURN (9)	31/0750	26.77 85.20	TRAK E → (10)
TURN (10)	31/0804	26.99 83.99	TRAK 330 → 6
6 TURN	31/0835	28.72 85.13	TRAK 6 → 120 976 MIN SLP
CLIMB	31/0901	27.97 83.63	FINAL POINT
LAND	31/0954	MIA	

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

HURRICANE RECCO PLOTTING CHART

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



DATE _____

OBSERVER _____

NOTE: Label full degrees according to location of flight area