

19910805HI-LPS

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

- _____ 1. Participate in general mission planning.
- _____ 2. Determine specific requirements for assigned aircraft.
- _____ 3. Determine from flight director whether aircraft has operational fix responsibility. Director/meteorologist and CARCAH unless briefed.
- _____ 4. *Ram files: /hed/dat/cape/C0511-1. RAM*
Time: 181806-191805
- _____ 5. Meet with flight director, navigator, and pilots. *provide copies of flight director, navigator, and*
- _____ 6. Report status of aircraft (location). *and crews to note recovery*

E.2.2 In-Flight

- _____ 1. Confirm from OAO flight director that aircraft is operational (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.

19910805HI-LP9

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 910805 I I Aircraft 43RF Flight ID 8/5/91

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Mark's</u>	Flight Director	<u>Parrish</u>
Cloud Physics	<u>Black</u>	Pilots	<u>McKim / Player</u>
Radar	<u>Kebecho</u>	Navigator	<u>Strong / Nokutis</u>
Doppler	<u>Testud</u>	Sys. Engr.	<u>Wade</u>
Photographer		Data Tech.	<u>Lynch</u>
Omegasonde		El. Tech.	<u>Roles</u>
AXBT/AXCP		Other	<u>Saunders, Willis, Hallett</u>

Take-Off 180930 Location MIA Landing Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind

C. Mission Briefing

CAPE #1

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)

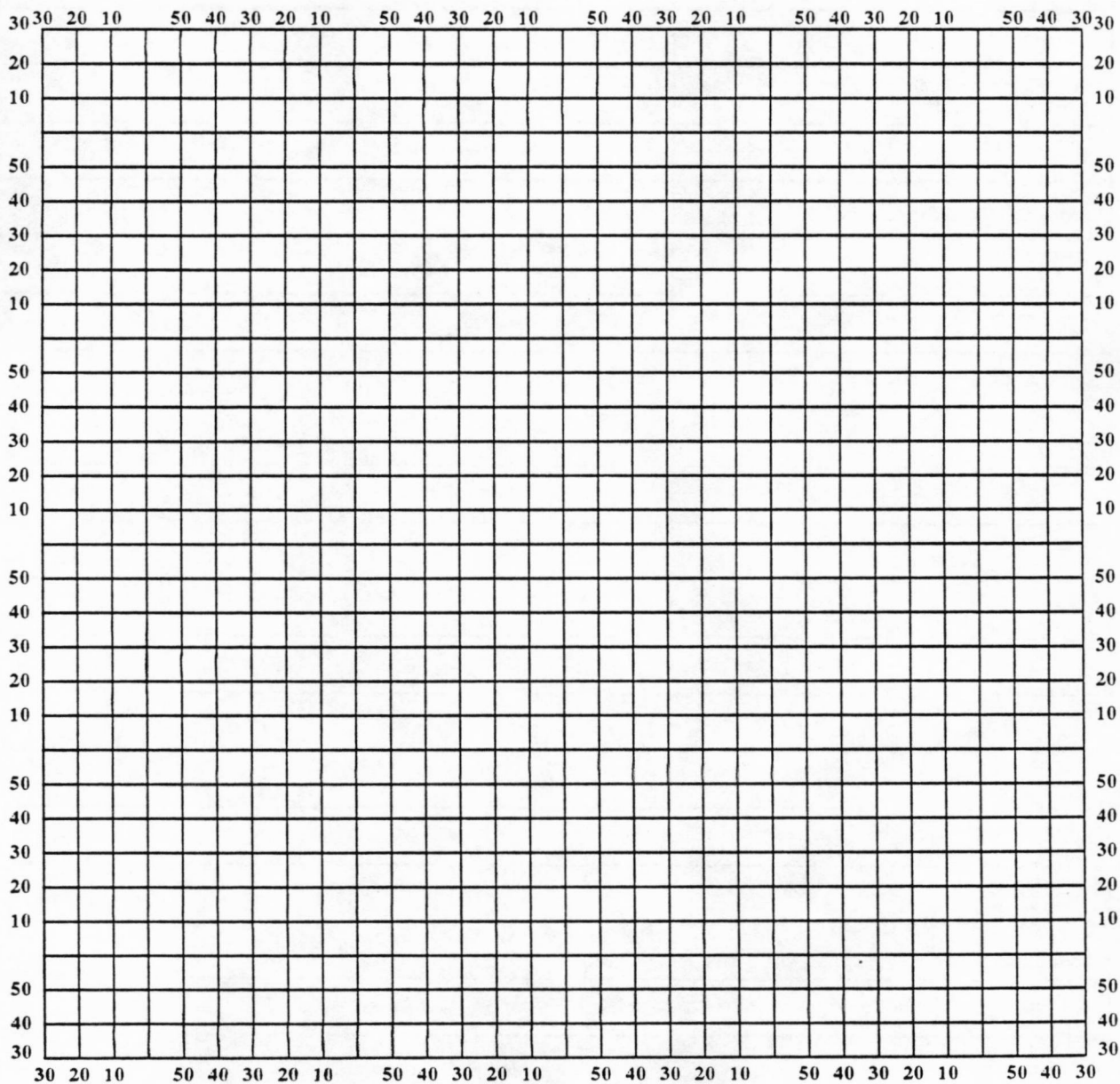
fly coordinated patterns with
CaPE radars - start flying CP-3, CP-4
baseline.

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.

after beam 65-2 wedge missing
0.6° az offset from the start
noise low

Lead Project Scientist Event Log

Date 810805 I Flight 43RF LPS Markus

Time	Event	Position	Comments
TD	180930	MIA	
JP	CP-4 Patrick	1850	baseline runs over Patrick
			TK 280
185130			Targets to right of TK
185300	CP-4 sweep 36LF 460 TA		
1860	CP-3		TK 119
1908			end leg 90-270 turn.
1909		TA sweep 790	setup scanning right side
			Sector 190° center at 90
1913			TK 280
191444	CP-4		
191730	Take out of sector		switch not working as I thought
191900	NW end of leg		big sectors cut out
1923	TK 120	to CP-4	90° az, antenna not.
1933	TK 280	to CP-3	Jim Roles checking radar
			clouds build and 3 fast.
	Jack says INB #2 seems better		changing tilt where I thought.
	Radar is set to INB #1		
1943	turn TK 120		alot more suppressed this leg,
			stuffs collapsing

2.565

6260

4

1.9
1.35

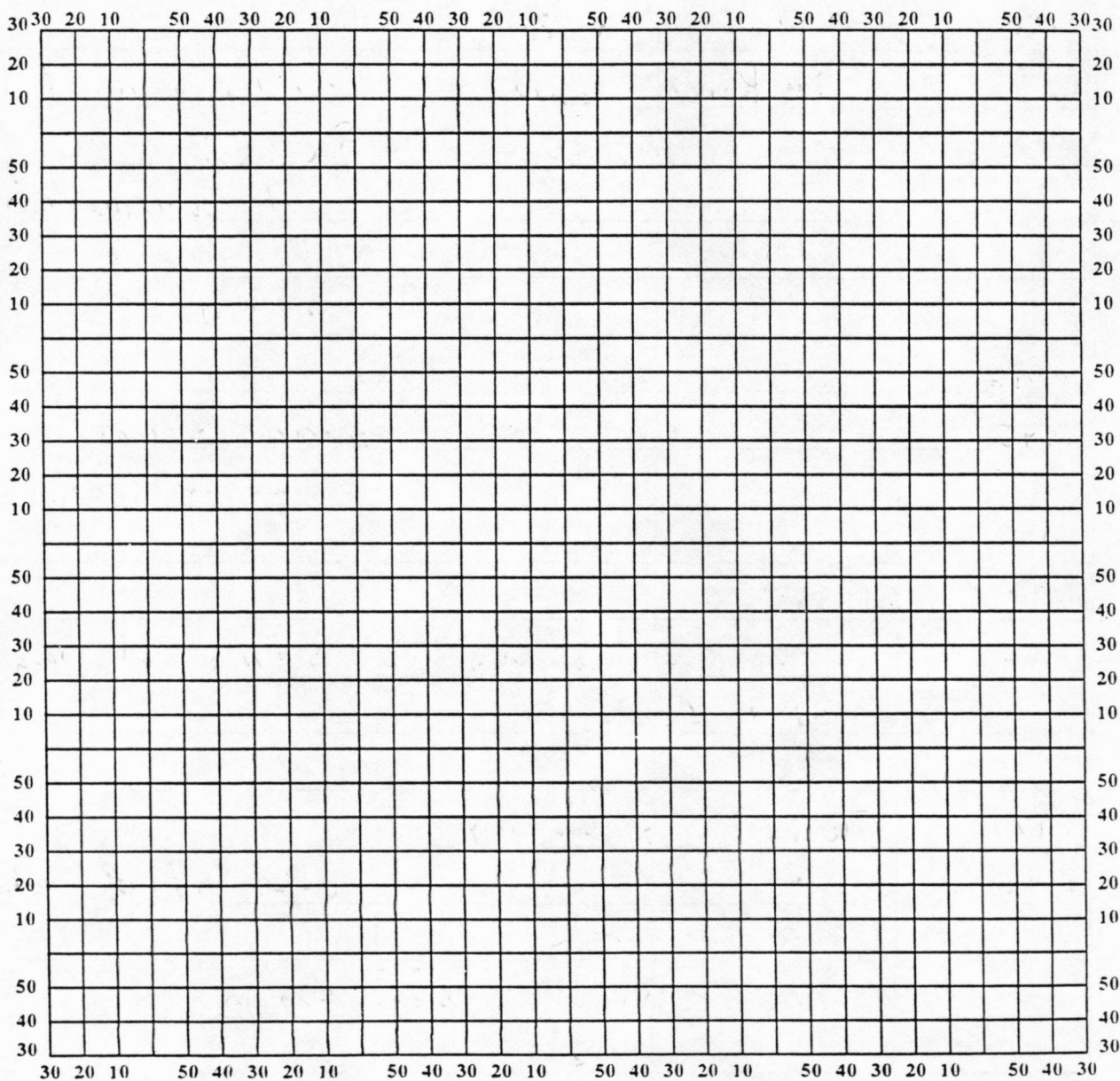
4

Hurricane Recco Plotting Chart

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

1215
135

Date _____ Longitude _____ Observer 2565



561
564
567
:
:
:
595

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

#2

Lead Project Scientist Event Log

Date 910805 J1 Flight 43RF LPS Macler

Time	Event	Position	Comments
1954	Turn	TK 280	
	Jim Roles	playing with	TA radar this leg.
2008	Turn TK 120	Jim Roles	looking at data
			TA antenna closely this
	Antenna switching	properly but	leg.
		chopping out	150 sector centered on 1900
2026	circle to	check radar.	97.5 ft beam only.
204049	turn tk N	in box around S lobe.	
		low cu developing in lobe.	
2042	Turn TK W	in box	
2048	Turn TK S	in box 28°17'N 81°W (Loran)	
2054	Turn TK E	in box 27°53'N 81°W (Loran)	
		2057 sector mode to Left.	
2105	Turn TK W	in box	one small cell left.
2112	Turn TK S	in box	in box
2118	Turn TK E	in box	quite SE of MLB
	TA S calib.		
2125	Turn TK N		very suppressed.
2128			
2130	Done heading to MIA		