

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 AOC 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 AOC 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 AOC flight director 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 AOC flight director.]
- ☐ 4. Obtain a copy of the 10-s flight listing from the AOC 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 09/29/92 Aircraft 43 RF Flight ID 920929I1

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Willis / M Black</u>	Flight Director	<u>Damiano</u>
Cloud Physics	<u>R. Black</u>	Pilots	<u>Turner / Kennedy</u>
Radar	<u>M Black / Houston</u>	Navigator	<u>Kozack</u>
Workstation	<u> </u>	Sys. Engr.	<u>Roles</u>
Photographer	<u> </u>	Data Tech.	<u>Lynch</u>
Omegasonde	<u>Willis</u>	El. Tech.	<u> </u>
AXBT/AXCP	<u> </u>	Other	<u> </u>
Charge Probe	<u>Houston</u>		
Take-Off	Location	Landing	Location
	<u>Puerto Vallarta</u>		

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>29/15Z</u>	<u>16.8N</u>	<u>114.2</u>	<u>948 mb</u>	<u>115 kts</u>
<u>30/00Z</u>	<u>16.7</u>	<u>115.6</u>	<u> </u>	<u>115 kts</u>
<u>29/18Z</u>	<u>17.0</u>	<u>114.6</u>	<u>probably</u>	<u>115 kts</u>
			<u>changed</u>	

C. Mission Briefing

Fig 4, cyclone evolution 3 hr
Electrification 2 hr

17.0
114.6 115/6

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	☒	☒	
Radar/LF	☒	☒	
Radar/TA (Doppler)	☒	☒	
Cloud physics	☒	☒	
Data system	☒	GRAPHICS OUT	
Omegasondes	☒	☒	
AXBT/AXCP	☐	☐	
Workstation	☐	☐	
Photography	☒	☒	

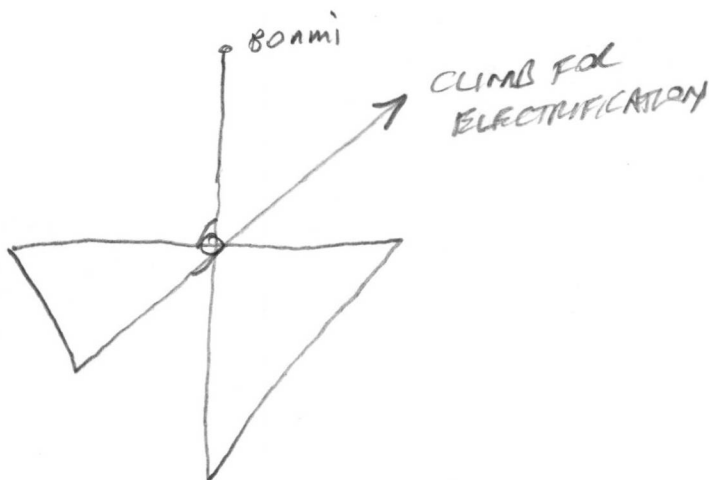
REMARKS:

1835Z STILL WORKING ON GRAPHICS
CANT USE HV CHARGING SYSTEM PROPERLY W/O IT

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

1. 2 Fig 4's with 60 n mi legs
2. Electrification, first radial legs at FL 140 Then climb as possible

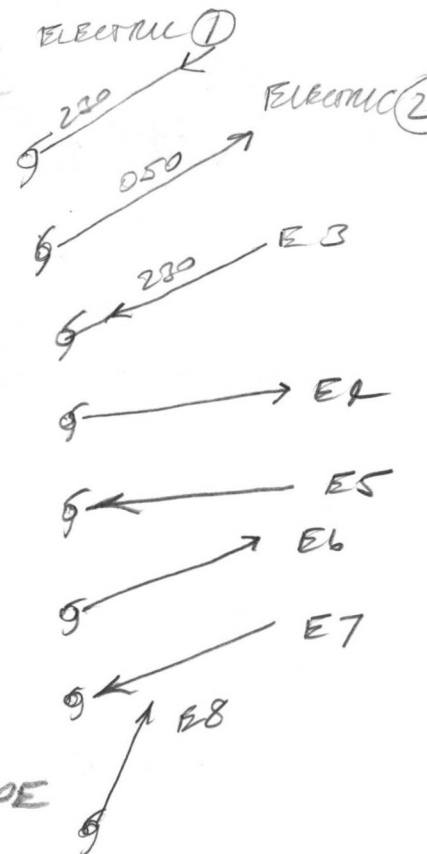
E. II. Actual Flight Pattern



ELECTRIC

RADIALS 045, 225

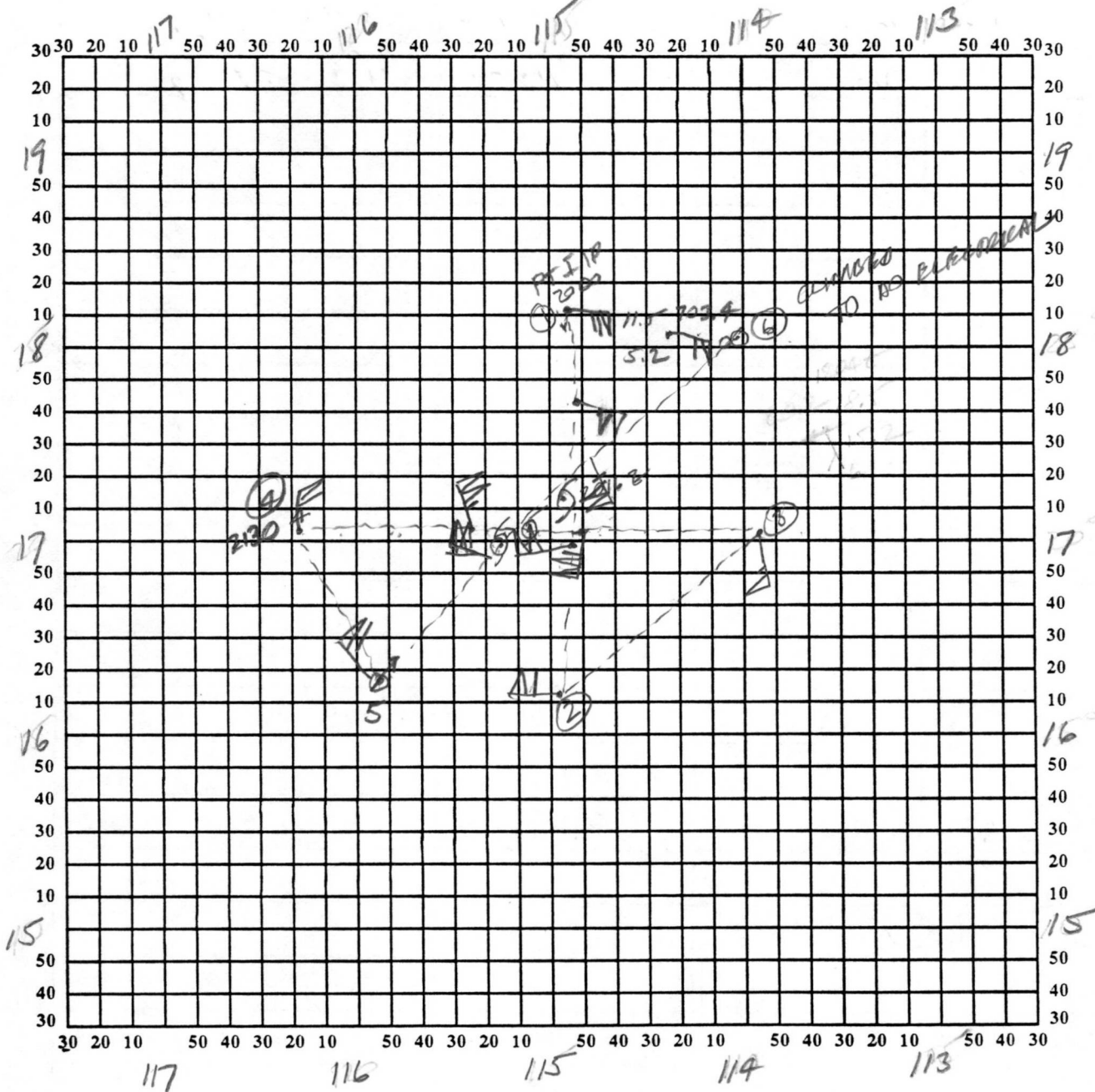
060, 080 ON NE TOE SIDE



Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date 09/29/92 Aircraft 43 RF Observer Willie



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

Lead Project Scientist Event Log

Date 9/29/92 Flight 920929I LPS Willis M. Block

Time	Event	Position	Comments
2153/20	IN EYE	17 6.2/115 12.7	INNER EYE OFFICE 995.7 mb 12.4/12.3
2204/20	POINT 6	17 35.1/114 38.6	3091 698.3 9.9/9.9
2217/30	HEADING BACK IN AT	+2.8°C +9.5°C	PAN 1 ELECTRIC
2235/38	IN EYE	17 8.6/115 15.6	8.5°C (9741/4537) 557.9 NOT MUCH CONVECTION
2241/20	BACK OUT ON RECIPROCAL	111 knots	ELECTRIC 2 4742/4560
	CLIMBING AT HIGH AS WE CAN		9652/4765
2259/30	ELECTRIC 3	5723/5917	-9.6°C TRM 235 WILL COME OUT AS OBO
2314/00	ELECTRIC 4	17 10.4 115/26.0	5967/5905 IN EYE 2.9/-2.8 5945/5855 UPWIND OF RECHER
	ELECTRIC 5		402.5 mb
2353/45		17 34.9 114/48.1	-11.0/-12.3 7144/7461
01			
0134/15	RETURNING	19/12.8 109/7.4	064/02 -12.4 437.2 -19.0
0202/00	descending	20 14.9 106/36.6	128/05 504.2 -5.5/-11.5
0224/53	landed PVA	SP1 20/40.8 105/15.2	20/43.9 105 13.4 INTERNAL

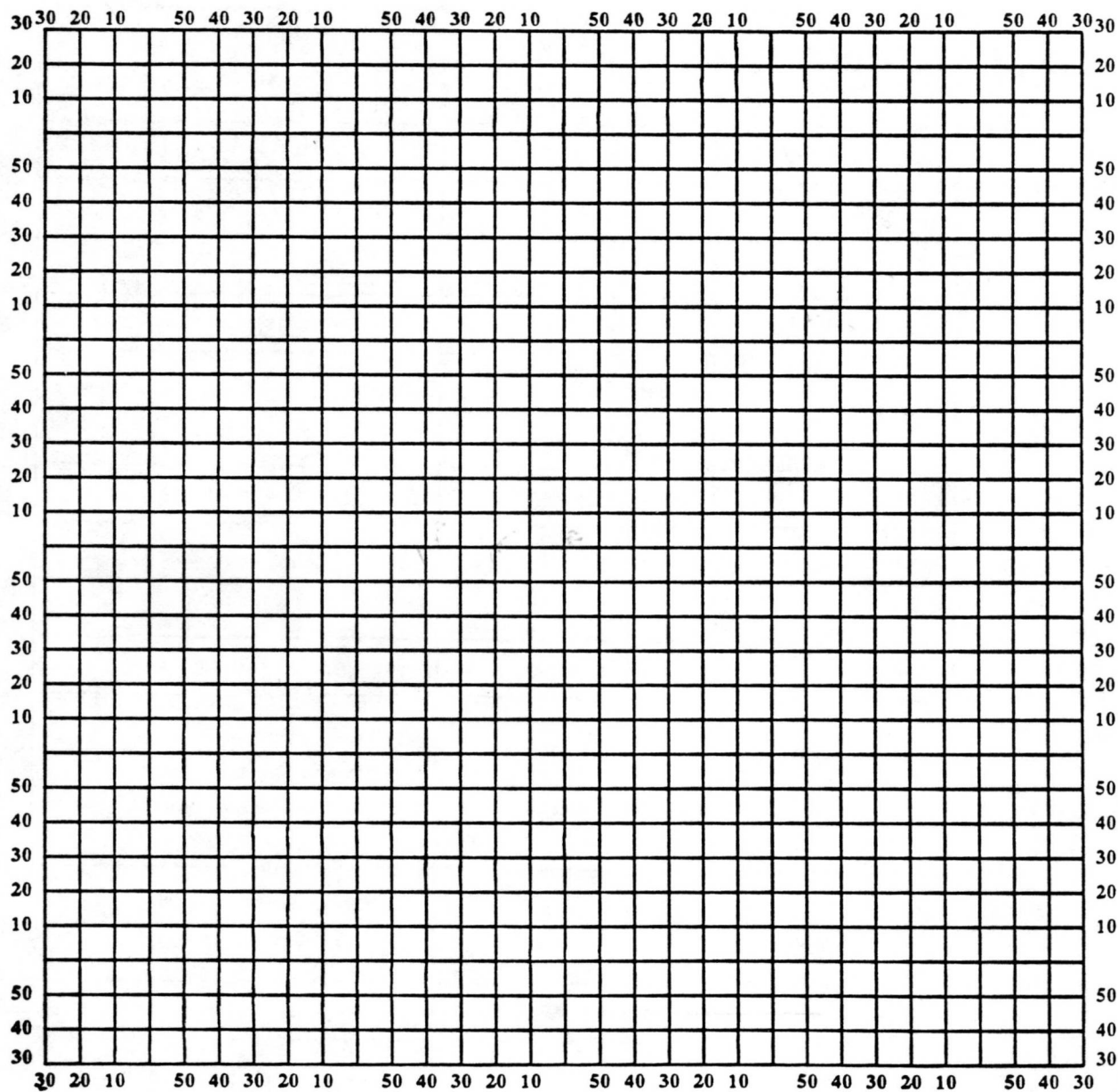
6156
6338

6551
6931

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date _____ Aircraft _____ Observer _____



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

020 ON 200

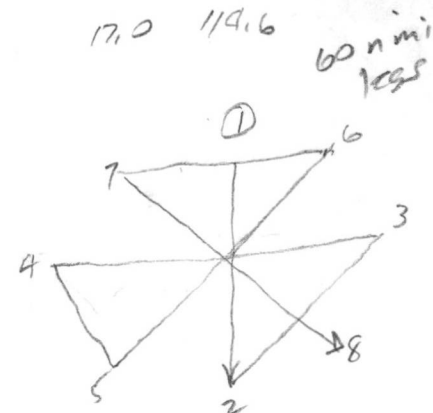
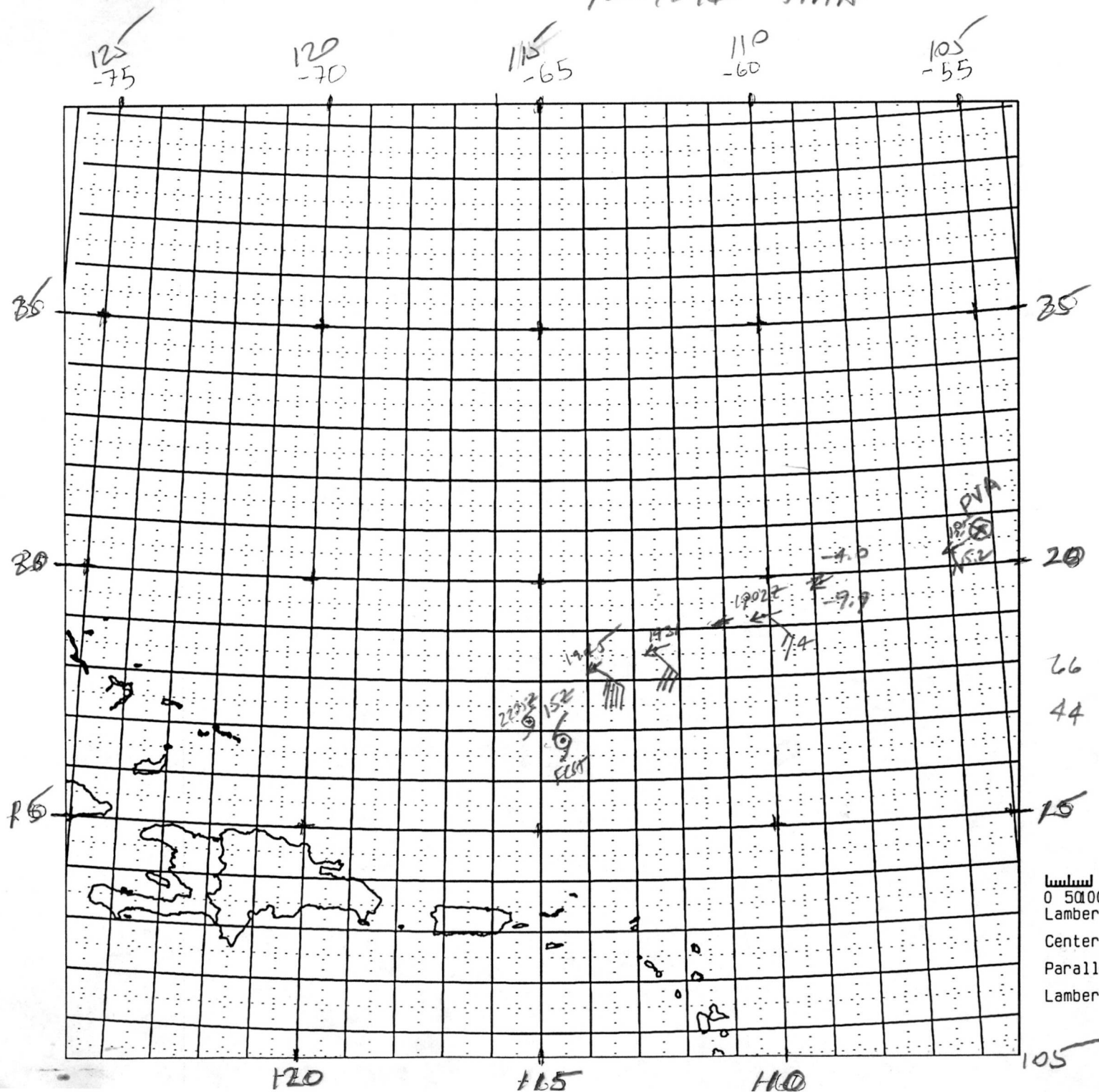
Lead Project Scientist Event Log

Date 9/29/92 Flight 920929I LPS Willis M Black

Time	Event	Position	Comments
1751/50	TAXI PVA	^{GPS} 20/40.7 105/15.1	
1758/39	T/O PVA	20 38.4/105/18.5	997.4 ^{27.8} 238/06 PA170 25.8
1811/20	Don't have	graphics for	charge probes
1839/47	19 46.7 108/16.7	149/02 ^{-4.4} -9.8	504.0 SS15 winds suspicious
	18Z Fix	17.0N 114.6W	115kt probably stronger
	WILL DO FAST ONLY ON OUTSIDE LEGS OF FIG 4		
1900/50	19 19.2 109 59.1	144/15 -2.9/-11.2	504.9 SS04 PA
1911/23	^{GPS} 19 5.0/110 52.2	SOCORRO ISLAND	PORT FORWARD CLOUDS ABOVE ADJACENT WIND VERTOL SE → CW
1916	STORMA ^{FIRST} IN VIEW ON LF	RADAR NOW	
	GRAPHICS OK NOW,	DOWN AGAIN	1918Z
1920 Z	MIA REQUESTED VORTEX, WILL DO EYE DROP ON FIRST PASS		
1930/50	18 37.2 112/29.2	144/31 -4.3/-12.2	505.0 SS02 CONCENTRIC EYE WALLS NOW
1943/30	18/19.4 112/33.5	Gradual descent to IP	
1959/16	#1 18/8.2/114/59.6	088/77 11.6/5.6	703.6 2972 TURNING SOUTH
2007/00	17/44.9 114/52.9	101/98	WILL MAKE EYE DROP
2012/39	INNER WALL	106/LOT 129 max	NICE CLEAR EYE
2018/40	EYE	994 mb.	FORWARD FILM BRW2 SHARP WALL ON SOUTH
2026/56	#2 16/13.7	114/58.3 267/62	9.1/9.9 701.4 2996
2059/00	#3 16/58.4/113.9	173/59.9 2972 703.6	OUTER EYE REPLACING INNER EYE 045
2112/00	IN EYE	17 3.5/115 10.6	994.1 mb 001/12 19.4/11.9
2127/50	#4 17 3.6	116/17.0 028/63	9.5/9.2 701.6 2995
2137/33	#5 16 19.3/115/56.3	319/56 10.6/8.7	701.9 2991

WOT ON 220/10

920929I TINA



10 pm

7:30 DEPART

050	070
230	250
080	060
260	240

6663
44519

0021/42

0 50/100 km
Lambert Conformal Conical Projection
Centered at 25.00 -65.00 . Bounding
Parallels 34.48 15.52 . Km/in: 300.0
Lambert Conformal Map