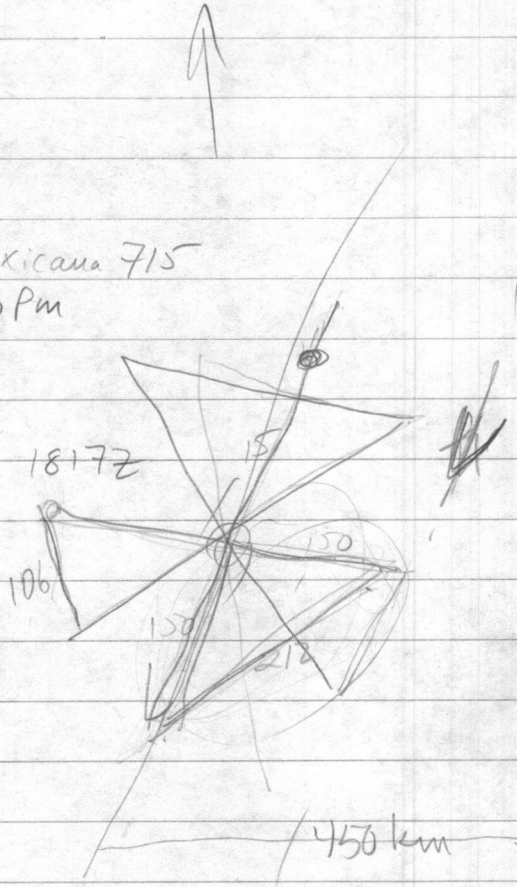
1992092 IHI - LPS

th room
9 - Operator
Long Distance

01 - 52 - 322 - 41700 RAMADA INN
42RF

Jim Carswell / Andy Payler

Mexicana 715
9:30 Pm



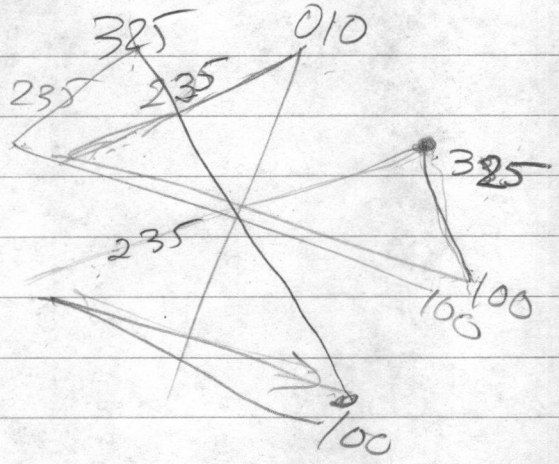
7. 300 km ÷ 212 / 3

300 km 43 min
300 km 43 +106
212 km 30 15 min
Fig 4 116 - 2h.
+15 min

Pete says

Tell Jim Carswell
set incidence
angle to match
satellite

5000 ft



5000 ft
Tina
9/21 11.9 108.3 1130Z

9/21 12.2 108.6 18Z
9/22 06Z

E.2 Lead Project Scientist (On-Board)

920921H1

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).

NHC & AOC verified ASDL link sent 1 vortex after last fix

✓ 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.

Form E-2
Page 1 of 5

On-Board Lead Project Scientist Check List

Date 9/21/92 Aircraft 42RF Flight ID 920921 ~~H1~~

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	Marks	Flight Director	Bogert
Cloud Physics	—	Pilots	Ticknor / Phillipsborn
Radar	Burpee / Dodge	Navigator	Strang
Workstation	—	Sys. Engr.	Wade / Zeke
Photographer	—	Data Tech.	Leno / Ramos
Omegasonde	—	El. Tech.	Roles
AXBT/AXCP	—	Other	Marvin (Falcon Associates)
UMASS	Carswell / Paylor		Sullivan Pall Andusan (radio)

Take-Off 1719 Location Puerta Vallarta Landing 2357 Location

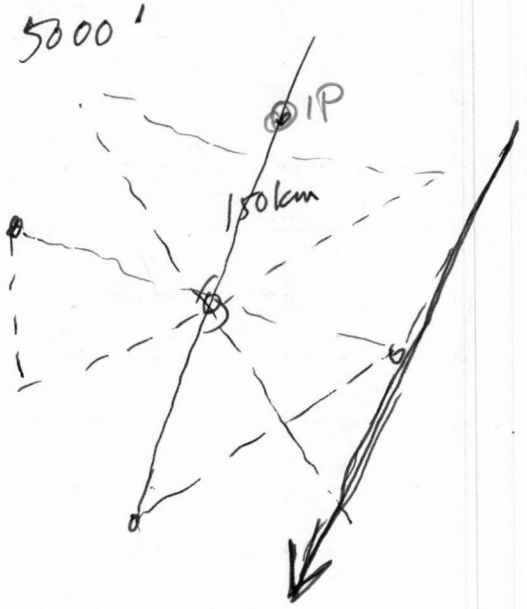
B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
9/21 1130Z	11.9	108.3		60-65 kts sust
→ 9/21 18Z	12.2	108.6		
9/21 15Z	11.8	108.1		

C. Mission Briefing

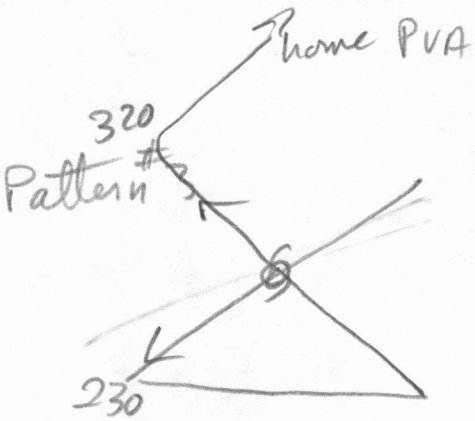
Vortex evolution / ERS-1 overflight
see p 14-15 in Ops plan
at 5000' / 150 km radius legs

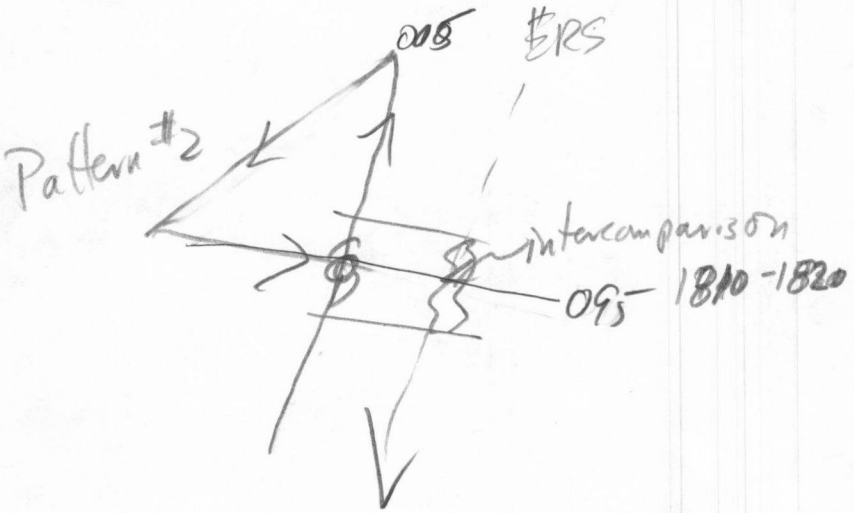
E. I. Proposed Flight Pattern (sketch or designate by number)



Vortex evolution
P15

E. II. Actual Flight Pattern





storm motion
330°/2.2 kts
strongest winds on SE side
storm probably slowing down and recurving - intensification likely

D. Equipment Status

Tapes

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft	↑	↑	↑
Radar/LF	↑	↑	↑
Radar/TA (Doppler)	↑	TA R/T swapped ↑	↑
Cloud physics	2D-C problems	No 2D-C	No 2D-C
Data system	↑	↑	↑
Omegasondes	—	—	
AXBT/AXCP	—	—	
Workstation	—	—	
Photography	Hasselblad ↑ Side cameras	↑	↑

7

1 DAT 1725-2214

Minolta has no batteries!!!!

REMARKS:

— 2D-C problems before TO - not high priority - go without
— TA R/T had problems first hour. Neal swapped R/T's worked real well once it warmed up. Jim Roles is still working on range delay problem (still present on this flight)
— Hasselblad worked intermittently
— CSCAT worked real well.

Form E-2
Page 4 of 5

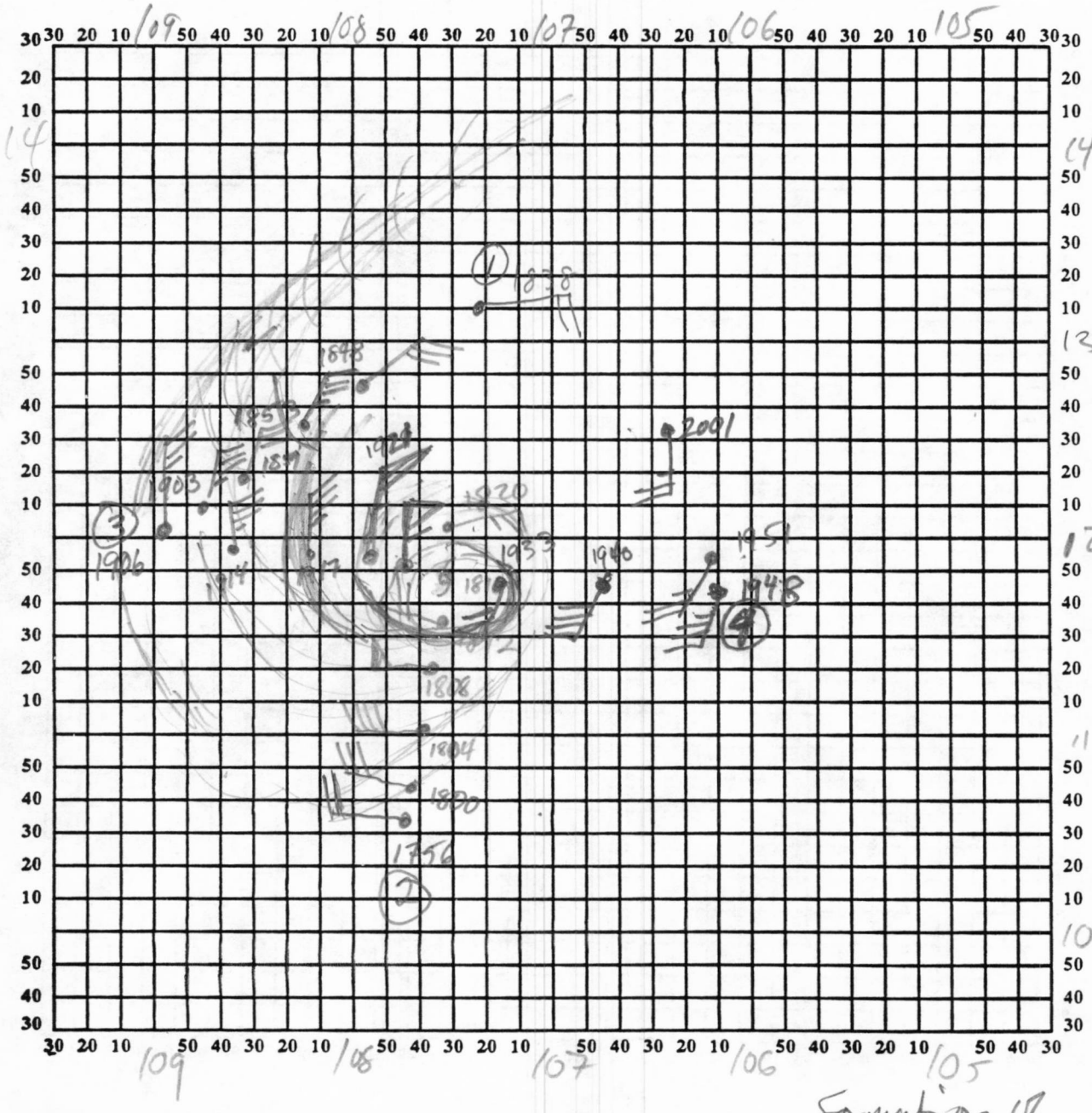
(2)

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

1st Fig 4
5000'

Date 9/21/92 Aircraft 920921H1 Observer Marks



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

Formation of small hook like SE corner of — feature with ~radius 5-10nm with 60kts winds around only Convection on S & SE side

Form E-2
Page 4 of 5

3 1 4 2

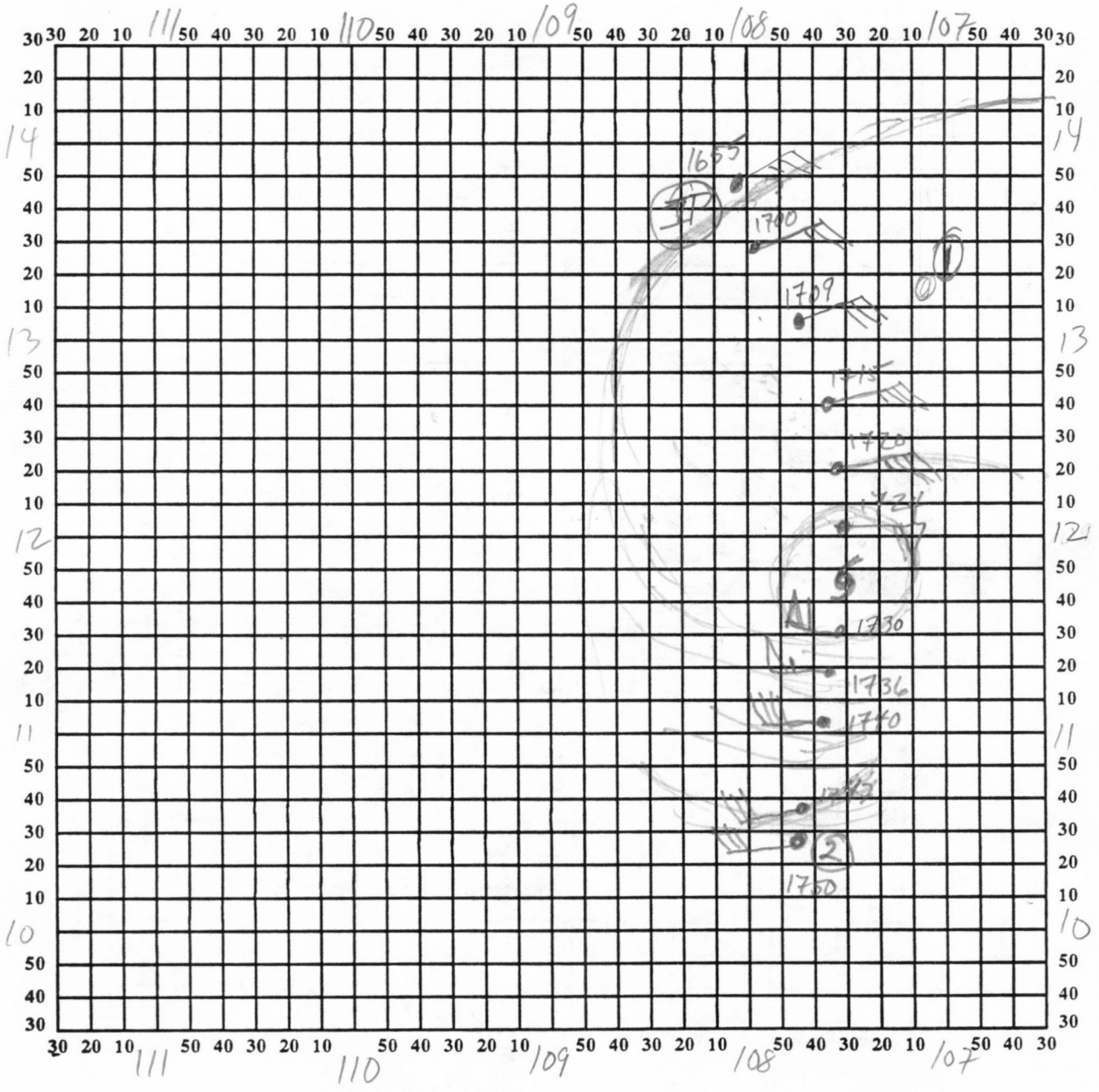
(1)

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

5000'

Date 9/21/92 Aircraft 42RF Observer Marks

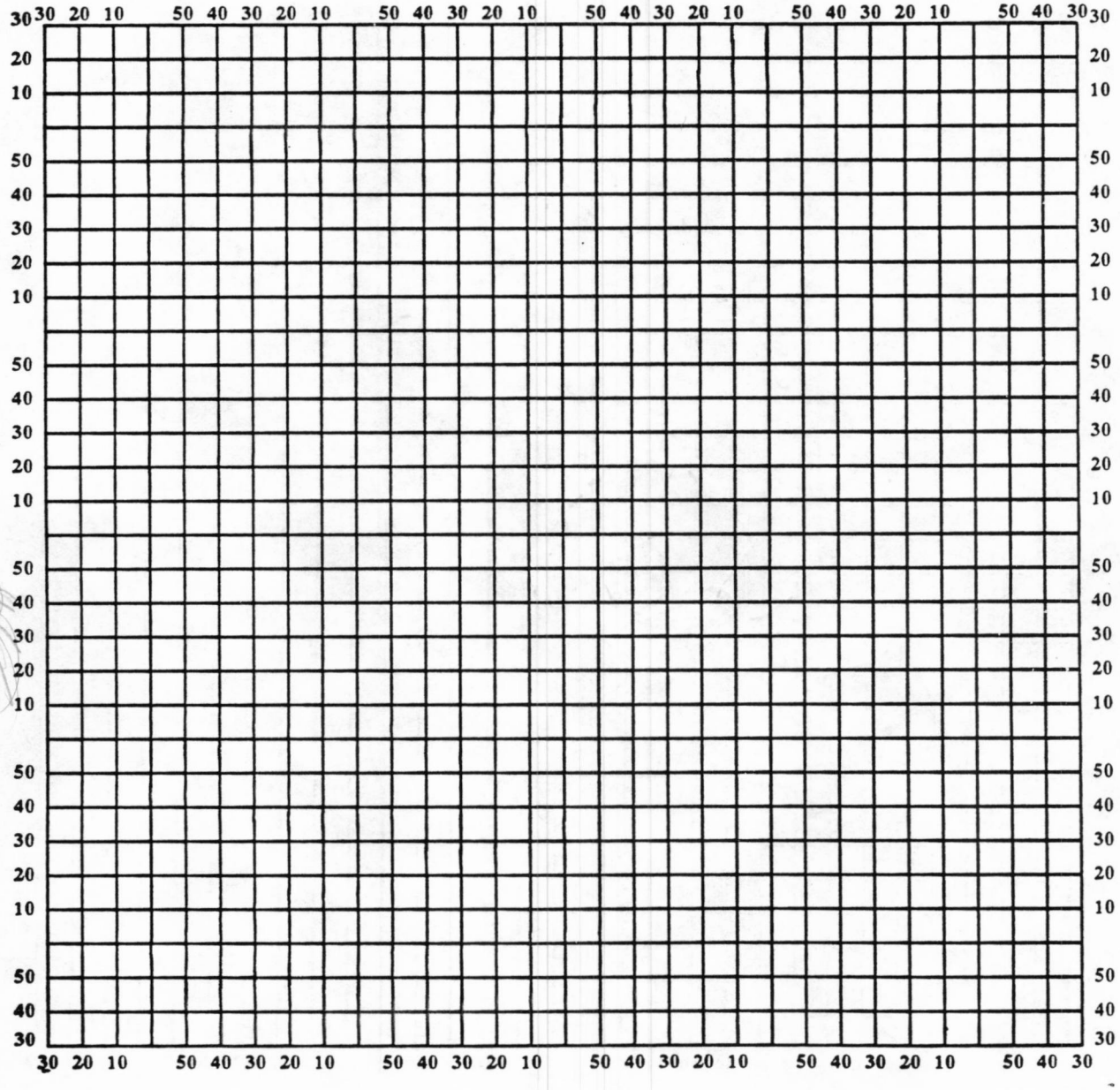


Note: Label full degrees according to location of flight area.

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.

Form E-2
Page 4 of 5

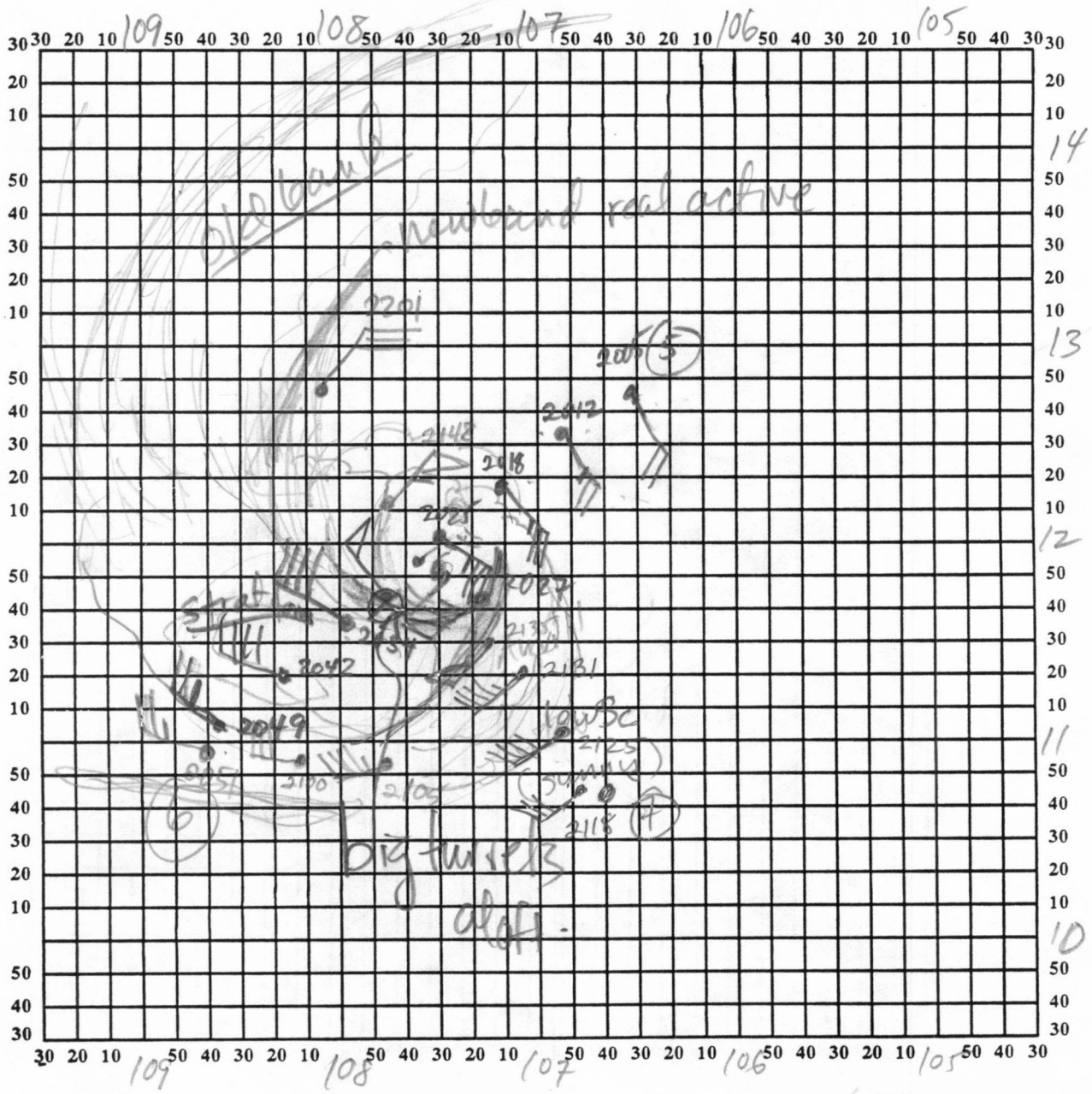
ram shaft in hook

Change hurr LF 5TH to have white at 55 dbz and double up blue at 0 5 dbz (3) Second Fig 4 5000'

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

Date 9/21/92 Aircraft 920921H1 Observer Marks



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

4.25 h

N 64.2 53.2 9.0

W 35.0 30.1 4.6

2144
1728
416

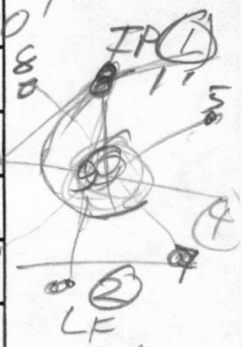
Form E-2
Page 5 of 5

C-band Altimeter off
Sat overpass
~1817 Z (Eq)
Hasselblad on
(1)

Lead Project Scientist Event Log

Date 9/21/92 Flight 920921 H1 LPS Marks

Time	Event	Position	Comments
151808	TO	GPS 20°41" 105°15"	Puerto Vallarta
1647	Start descent	14°15" 107°40"	just outside principal band
1658	(IP)	13°32" 108°02"	150km from G 5000'
			TK 165
172826	G	11°47.5" 107°30.4"	~990mb
175026	(2)	10°29" 107°43.9"	reverse heading TK 010 to G
1816	G	11°49" 107°32"	missed it turn to west
183852	(1)	13°12" 107°27"	turn TK 230°
190530	(3)	12°04" 108°55.2"	Turn TK 095
192800	G	11°53.2" 107°34"	989mb
			1932 real interesting
194800	(4)	11°43" 106°10"	Turn TK 320°
2005	(5)	12°47" 106°31"	TK 230°
2028	G	11°56" 107°38"	2033 TA turned left WOW!!



Sensitivity real good
TA 1715z
xmitter replaced
freq. drifting
Neal's on it
TA Doppler 12 S side of G high altitude

N	W
53.2	34
47.5	30.4
5.7	3.6

24 7.14 2.85 7.8 4.59

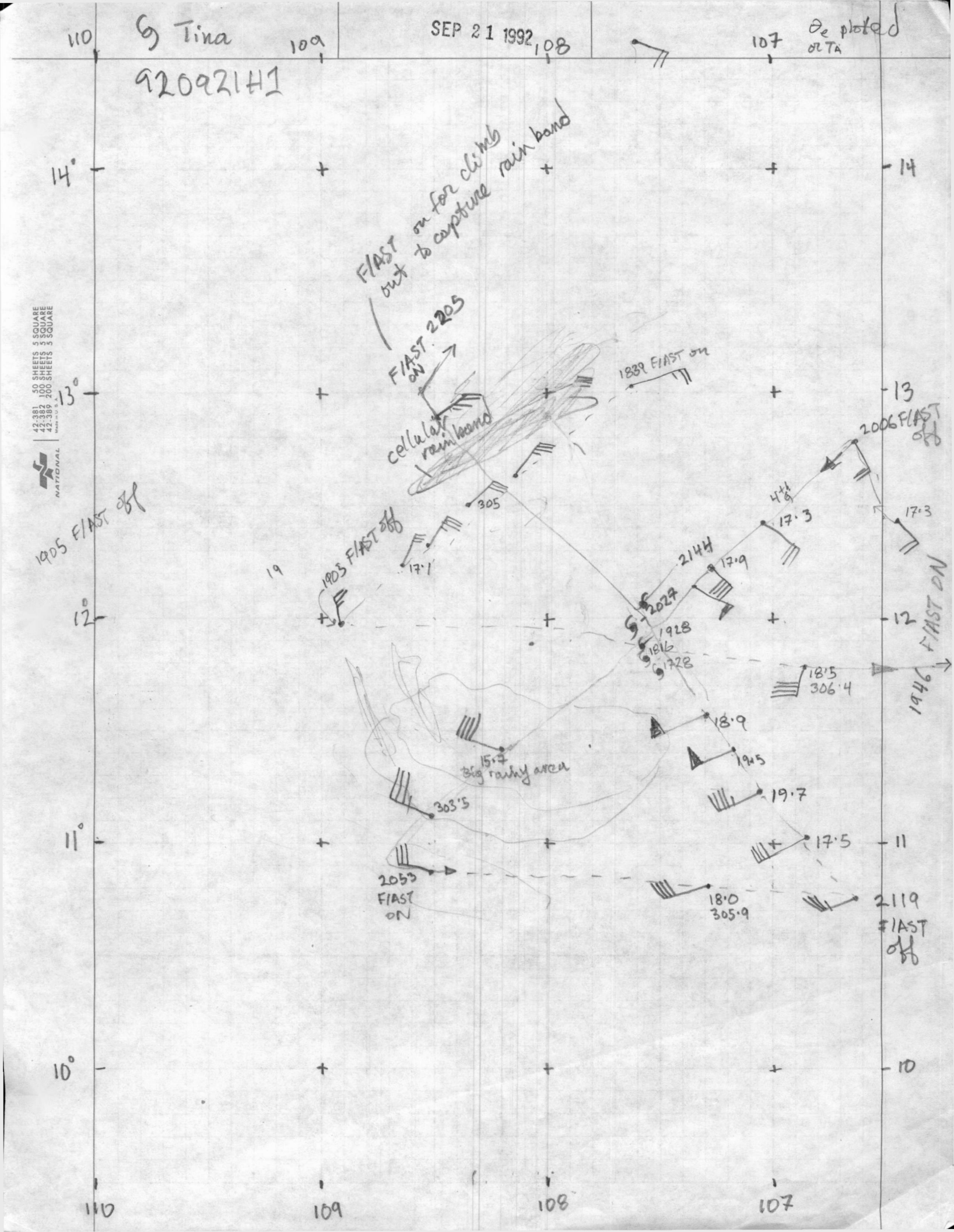
3.5 kts 325°

(2)

Lead Project Scientist Event Log

Date 9/21/92 Flight 920921 H1 LPS Marks

Time	Event	Position	Comments
2051	(6)	10°59" 108°43"	Turn Tk 095
2119	(7)	10°46" 106°41"	Turn Tk 320 to 6
			interesting tri 213645-213715
2145	6	12°04.2 107°35"	67-68 kts SE 6
			988mb 71kts plc
2204	(8)	12°59" 108°26"	WOW what a climb!!!
	GPS	13°2" 108°26" nice	new band at 2159 on outbound
			old band moved off. log
			This sucker is
			going to go!!!!


110
Tina
109
SEP 21 1992
108
107
θ_e plotted or TA
920921H1
14°
13°
12°
11°
10°
F/AST on for climb out to capture rain band
F/AST 2205
F/AST ON
cellular rainbands
1839 F/AST on
2006 F/AST off
1905 F/AST off
1903 F/AST off
305
17.1
19
17.3
17.3
2144
17.9
2027
1928
1816
1728
F/AST ON
18.5
306.4
1946
18.9
1945
15.7
Big rainy area
303.5
19.7
17.5
2053
F/AST
ON
18.0
305.9
2119
F/AST
off
110
109
108
107