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19920925 H1-LPS

TINA

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.
- 1 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.

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On-Board Lead Project Scientist Check List

Date 9/25/92 Aircraft 42RF Flight ID 920925A1

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Markes</u>	Flight Director	<u>Bogert</u>
Cloud Physics	<u>—</u>	Pilots	<u>McKinn/Kennedy</u>
Radar	<u>Dodge</u>	Navigator	<u>Strong</u>
Workstation	<u>Burpee</u>	Sys. Engr.	<u>Wade/Torrey</u>
Photographer	<u>—</u>	Data Tech.	<u>Raines/Leno</u>
Omegasonde	<u>—</u>	El. Tech.	<u>Roles</u>
AXBT/AXCP <u>S-cat</u>	<u>Paylor</u>	Other	<u>Arnason</u>
			<u>Jorge (Mexicana)</u>
Take-Off 1806Z Location <u>PVR</u>		Landing 0155Z Location <u>PVR</u>	

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>1400Z 1409Z</u>	<u>14.5</u>	<u>108.7</u>	<u>—</u>	<u>55 kts</u>
<u>21Z</u>	<u>14.5</u>	<u>108.5</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

C. Mission Briefing

vortex evolution and support
cloud physics p 12-13

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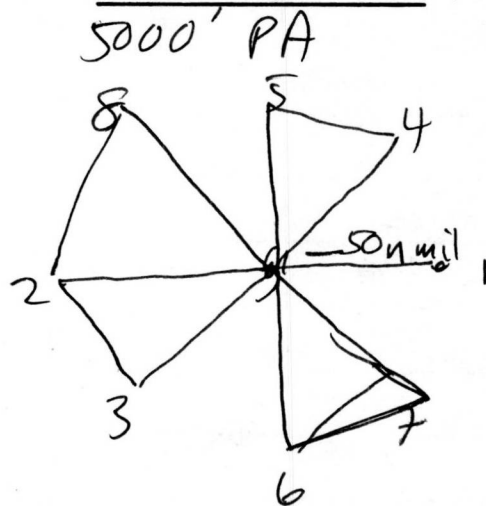
D. Equipment Status

Equipment	Pre-Flight	In-Flight	Post-Flight	
Aircraft	↑	↑	↑	
Radar/LF	↑	↑	↑	
Radar/TA (Doppler) ④	↑ DTR 2 bad	↑ TA R/T problems col failed	↑ ⑦	⑪
Cloud physics ①	—	—	—	
Data system ②	↑ graphics	↑ graphics worked	↑	①
Omegasondes	—	—	—	
AXBT/AXCP	—	—	—	
Workstation	—	—	—	
Photography ③	↑ Hasselblad	↑	↑	
C-scat	↑ flakey	↓ ⑥	↓	

- REMARKS:
- ① Cloud Physics - DAS problem - not usable
 - ② swapped data ~~system~~ graphics with 43RF because they need it more and theirs is shop.
 they were fine on 42RF
 - ③ Hasselblad has been flakey the whole time
 - ④ Radar data system DTR 2 bad no BOT 1/34
 - ⑤ TA R/T failed 0034 replaced R/T
new R/T failed 0034 ^{poor} tail data last half 3rd. Fig. 4
 - ⑥ C-scat computer wouldn't boot!!! nada
 - ⑦ TA R/T failed on ferry ^{to PVR from MIA} one failed today - different problems. Neal says can swap transmitter card from one to the other and be back in business tomorrow!

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



Pattern #1

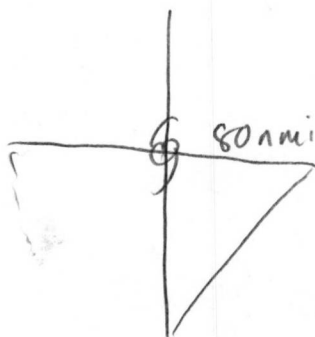


Pattern #2

E. II. Actual Flight Pattern

43 RF cracked windshield right after TO
reverted to long term monitoring (vortex evolution)
pattern 5000' PA 80 nmi radius legs.

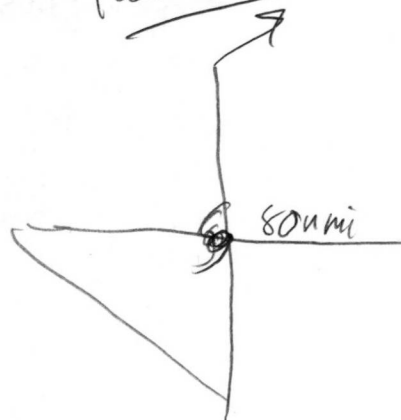
Pattern #1



Pattern #2



Pattern #3



Storm collapsed during flight weak TS by leaving
8h duration / 6 penetrations

5000' PA

Pattern I

A hand-drawn map on a grid, likely representing a celestial or geographical chart. The map features several labeled points and regions:

- Top Center:** Labeled "ID 1909".
- Left Side:** A curved line labeled "Stral".
- Central Points:** Numerous points are marked with dots and connected by lines. Some points are labeled with years: 1913, 1917, 1922, 1928, 1931, 1941, 1948, 1955, 2009, 2016, 2025.
- Right Side:** A large, irregular shape resembling a cloud or nebula is drawn.
- Bottom Center:** A point labeled "1955" is marked.
- Circled Numbers:** Several numbers are circled: 1, 2, 3, 4, 5, 6, 7, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

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

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#2

Lead Project Scientist Event Log

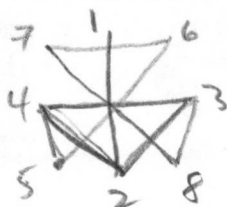
Date 9/25/92

Flight 920925H1

LPS Marly

Time	Event	Position	Comments
2218	(7)	17°37.7" 108°32.1" TK 135°	
2238	6	16°42.1" 107°40.5"	2237 lightning to right TA R/T drifting N on it.
225940	(8)	15°45.0" 106°40.2" TK 035	
2314	(3)	16°42" 106°12.6" TK 270 to 6	
2337	6	16°56" 107°37" TK 270 to (4)	
2357	(4)	16°54.9" 108°59.5" TK 135 to (2)	0011 lost TA
0024	(2)	15°36.2" 107°37.4" Changing R/T	0034 lost TA again new R/T
0047	6	17°04" 107°31" at the best spot	995
0108	(1)	18°27.3" 107°32.5" climb for PVR	

26
18
8.00h.



N 56
16 33

W
107 39

2037

23"

02

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes

TINA

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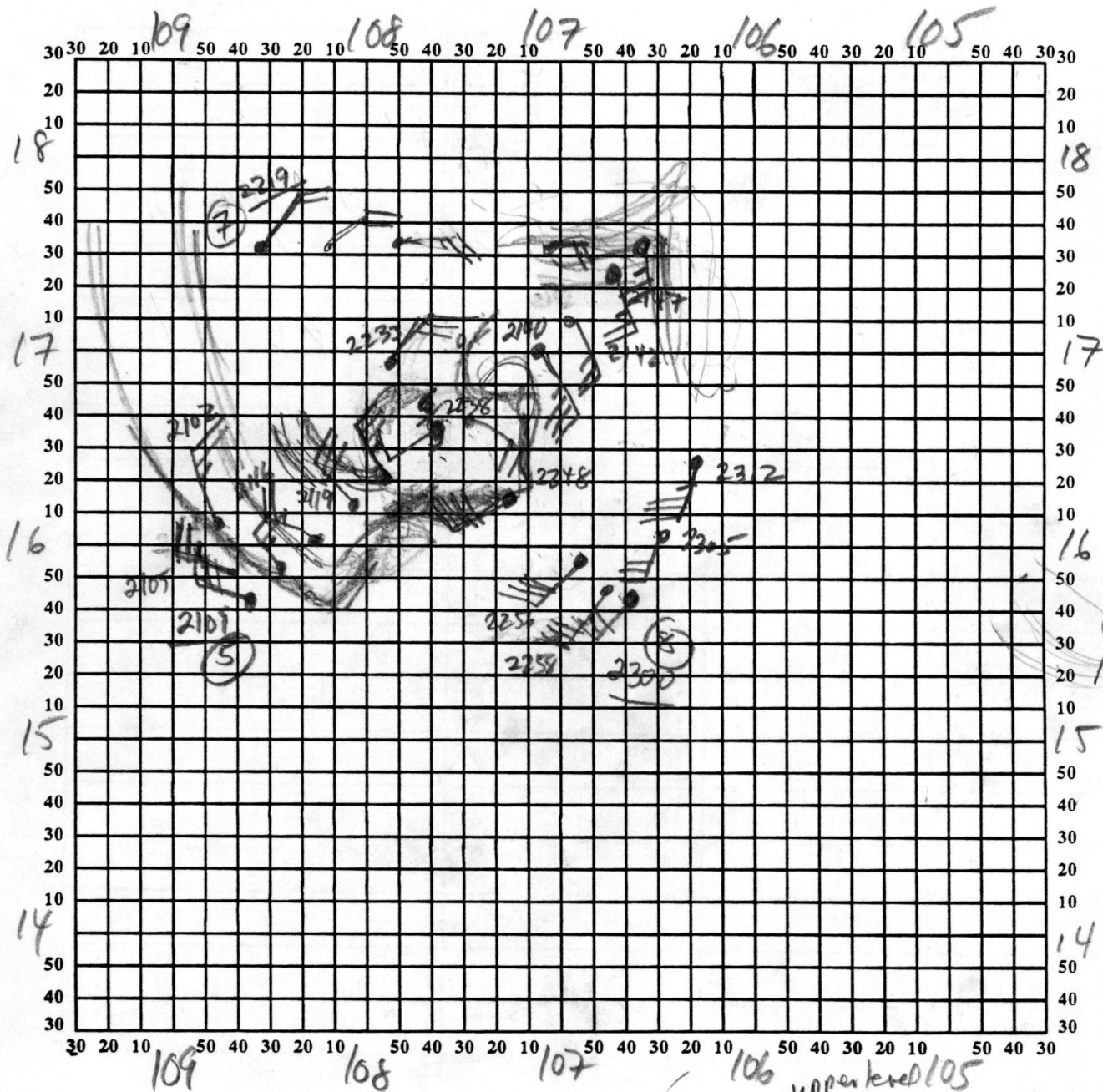
#2

5000PA

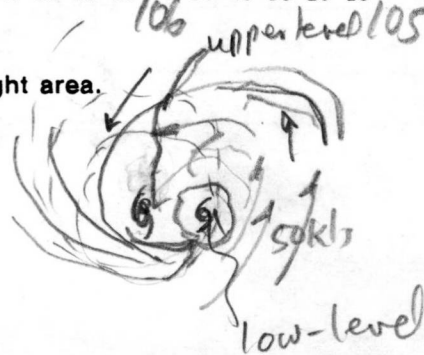
Date 9/25/92

Aircraft 42RF

Observer Mark



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



The upper level center is back where NHC thinks it is and the low-level center is running ahead

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Date 920925HI Flight 42RF LPS Machis

[illegible]

storm motion
010/08 Kts

T/NA
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Hurricane Recco Plotting Chart

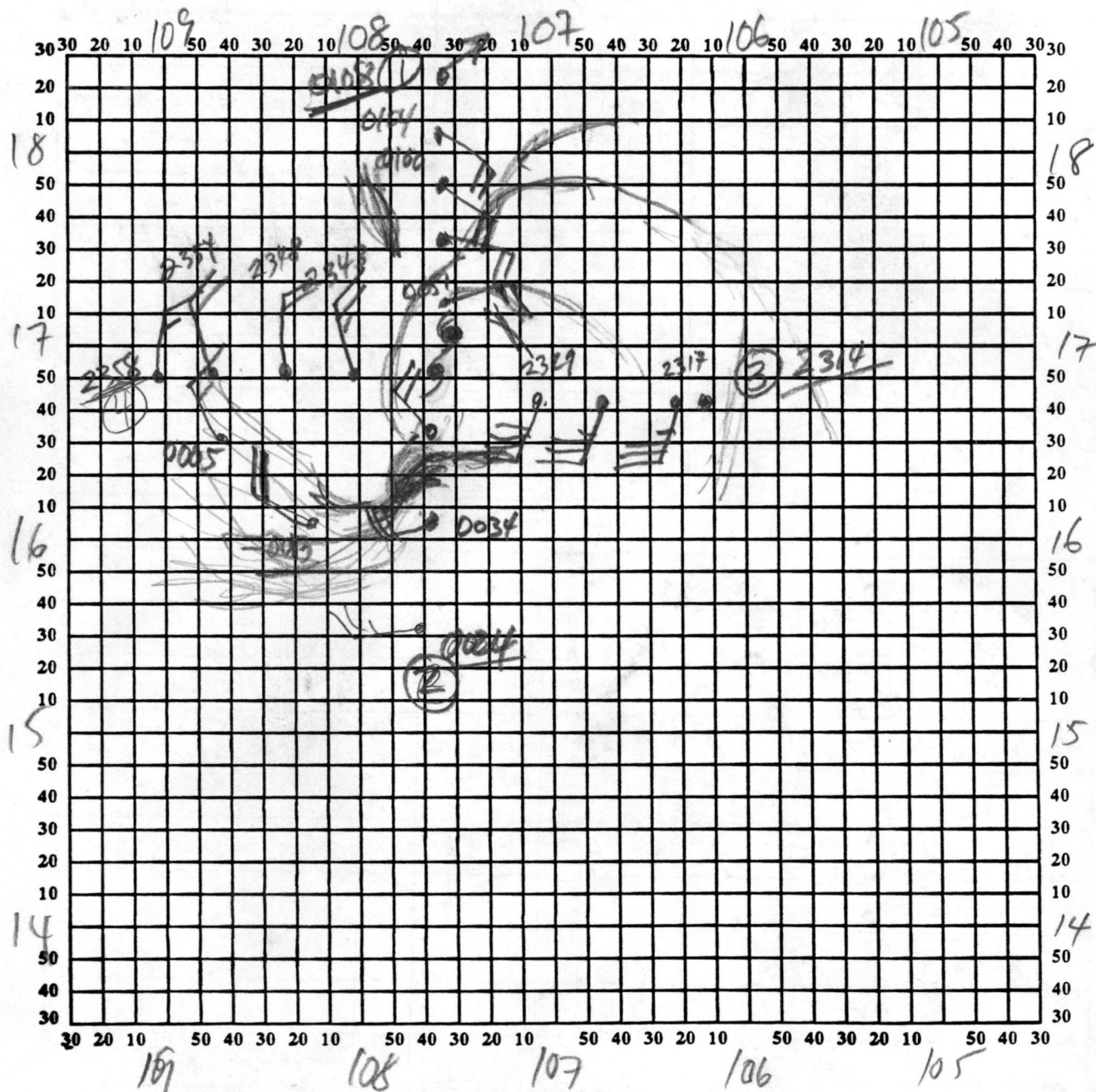
True at 25° Latitude, in Degrees and Minutes

Date 9/25/92

Aircraft 42RF

Observer Markus

#3
5000'PA

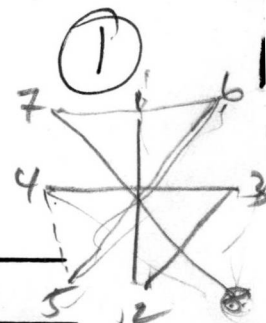


Note: Label full degrees according to location of flight area.

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Lead Project Scientist Event Log

TINA



Date 9/25/92

Flight 920925H 1

LPS Maulis

Time	Event	GPS Position	Comments
180600	TD	20°41.1" 105°14.9"	
			43RF Cracked windshield
190840	IP ①	17°39.5" 107°52.3'	TK 180
			to 5-613 blob
			ob correction 120 nm NE
1929	⑥	16°22" 107°44"	993 60 Kts (SE)
1954	②	14°59.7' 107°22.7"	Turn TK 035° to ③
2016	③	16°22" 106°24"	Turn TK 270° to ⑥
2037	⑥	16°33" 107°39"	993 mb 52 Kts
2056	④	16°32.4" 108°55.2"	TK 157° to ⑤
210840	⑤	15°44" 108°35.9"	TK 045°
2128	⑥	16°29" 107°36"	upper level
2150	⑥	17°32" 106°39.6"	TK 270°

change pattern to long term monitoring 80 nm legs

204/45

circular displaced westward SE winds 28 m/s over surface



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(2)

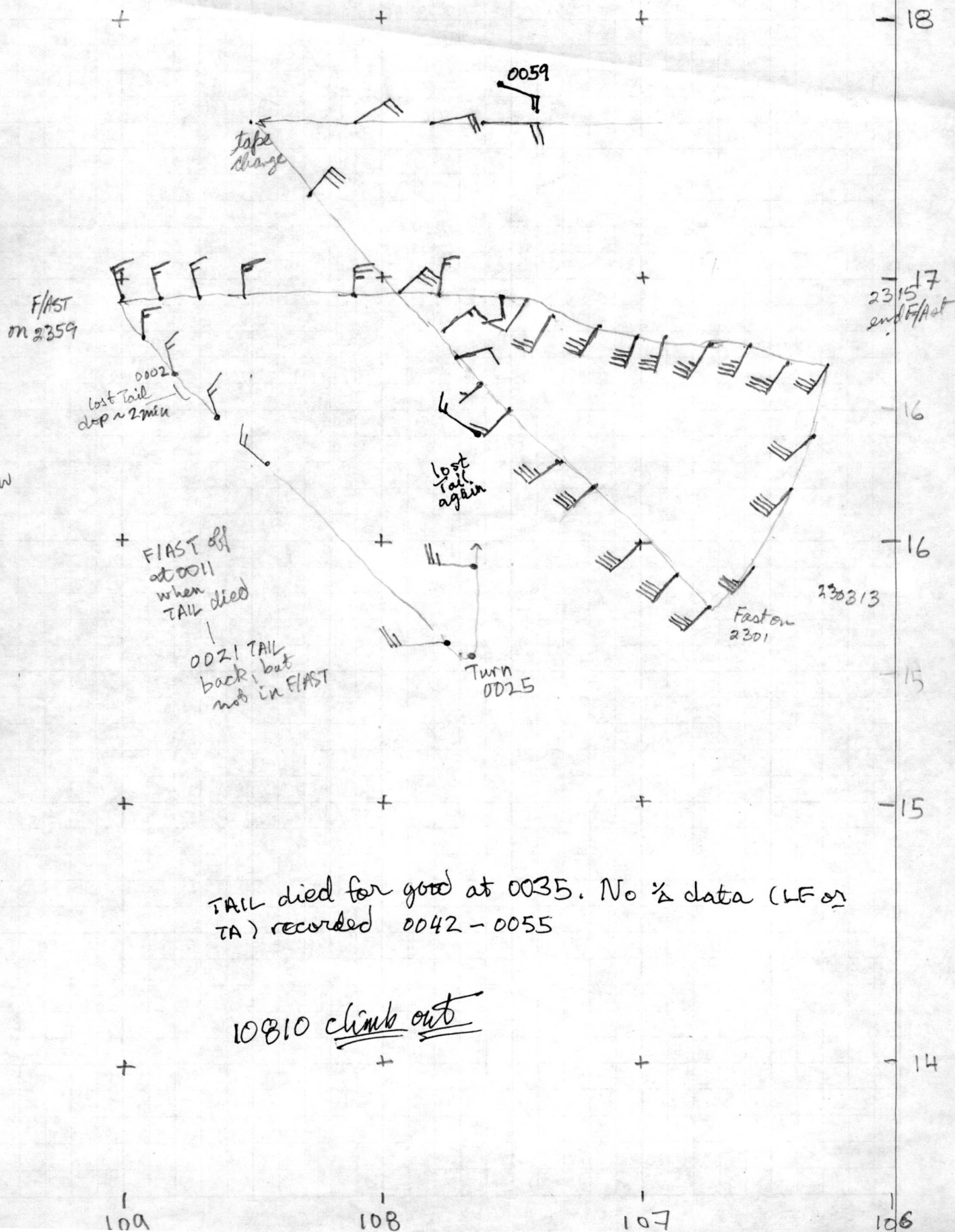
42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-383 200 SHEETS 5 SQUARE
MADE IN U.S.A.



④ 2238
6°42' 107°40'W

④ 2337
16°56'N 107°37'W

⑤



17

107°44'
16°22'

1716

2-381	50 SHEETS	5 SQUARE
2-382	100 SHEETS	5 SQUARE
2-389	200 SHEETS	5 SQUARE



15 -
16
20 37
16 33
20 73 9

~~14~~
15

134-

13

109

4
108

107

一 12

