

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).

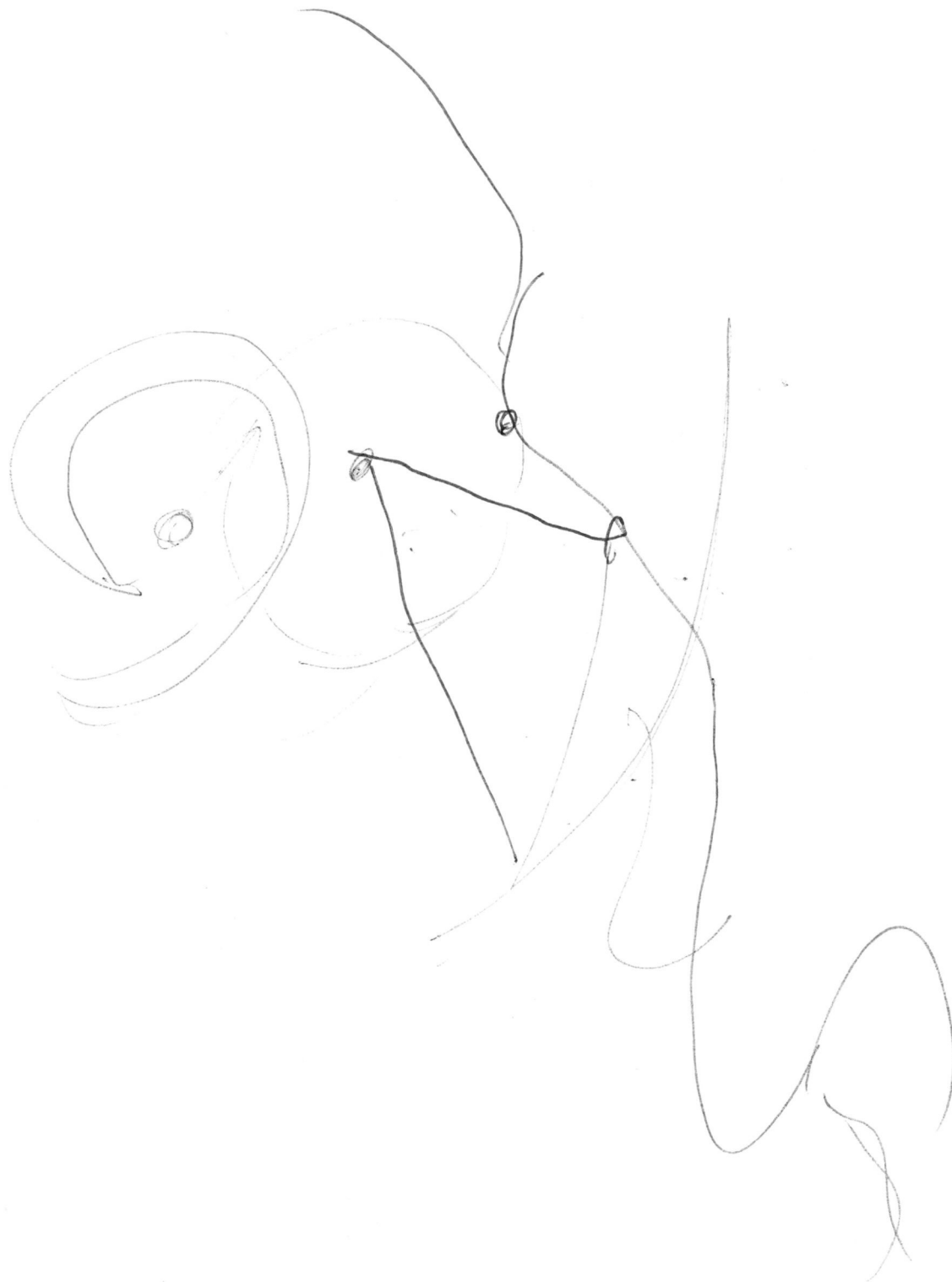
E.2.2 In-Flight

- ☒ 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. Determine next mission status, if any, and brief crews as necessary.
- _____ 5. 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 Checklist

DATE 31 Aug 1985 AIRCRAFT 43RF FLT 85083112

A. Participants

Turner, Myers, Gerrish, Ricci

Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Maury</u>	Gust Probe	
Cloud Physics	<u>B. Black</u>	Omegasonde	
AXBT/AXCP		Sys Eng	<u>Goldstein</u>
Hot Film		Data Tech	<u>Stone/Bogert</u>
Radar	<u>Kohler/Barry</u>	EI Tech	
Flt Dir/Met	<u>Darby</u>	Other Doppler	<u>Lord</u>

Take Off 181600 Location MIA Landing 040616 Location MIA
25.78 80.22

B. Past and Forecast Storm Position

Date	Time	Latitude	Longitude	MSLP
<u>1350Z</u>	<u>1630Z</u>	<u>28° 45'</u>	<u>84° 06'</u>	<u>975 mb</u>
	<u>1450Z</u>	<u>28° 49'</u>	<u>84° 09'</u>	<u>974</u>
	<u>1413Z</u>	<u>28° 47'</u>	<u>84° 15'</u>	<u>976</u>
	<u>1254Z</u>	<u>28° 48'</u>	<u>84° 22'</u>	<u>975</u>
	<u>1128Z</u>	<u>28° 44'</u>	<u>84° 30'</u>	<u>974</u>
<u>Prog. 9</u>	<u>18Z</u>	<u>28° 55'</u>	<u>83° 40'</u>	

C. Mission Briefing

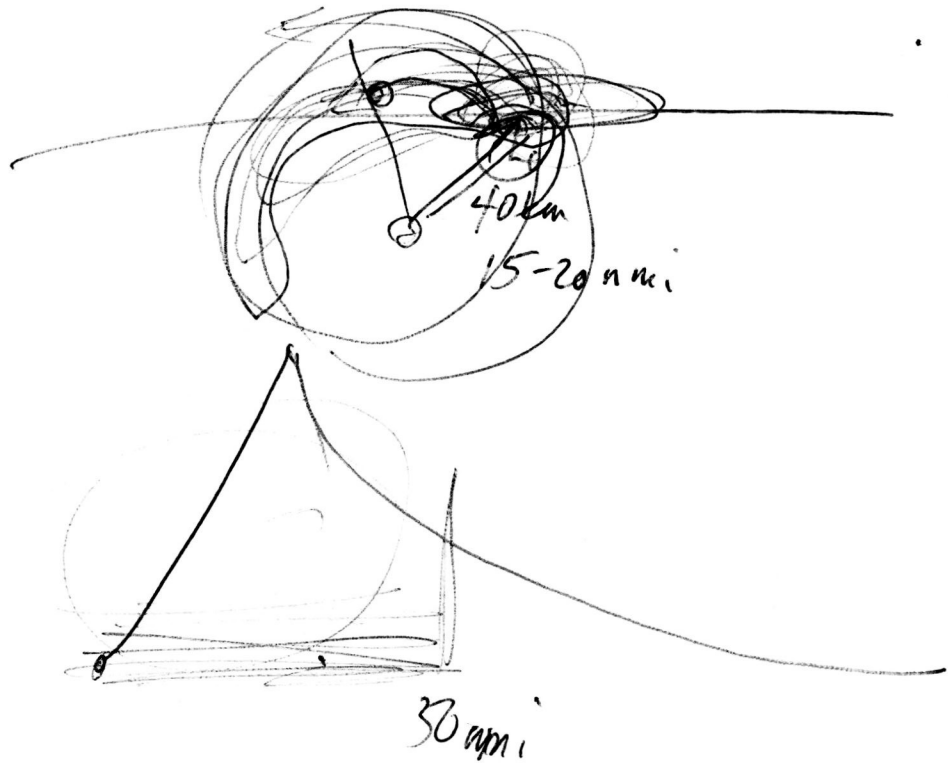
modified land fall pattern to utilize Doppler
radar.

D. Equipment Status

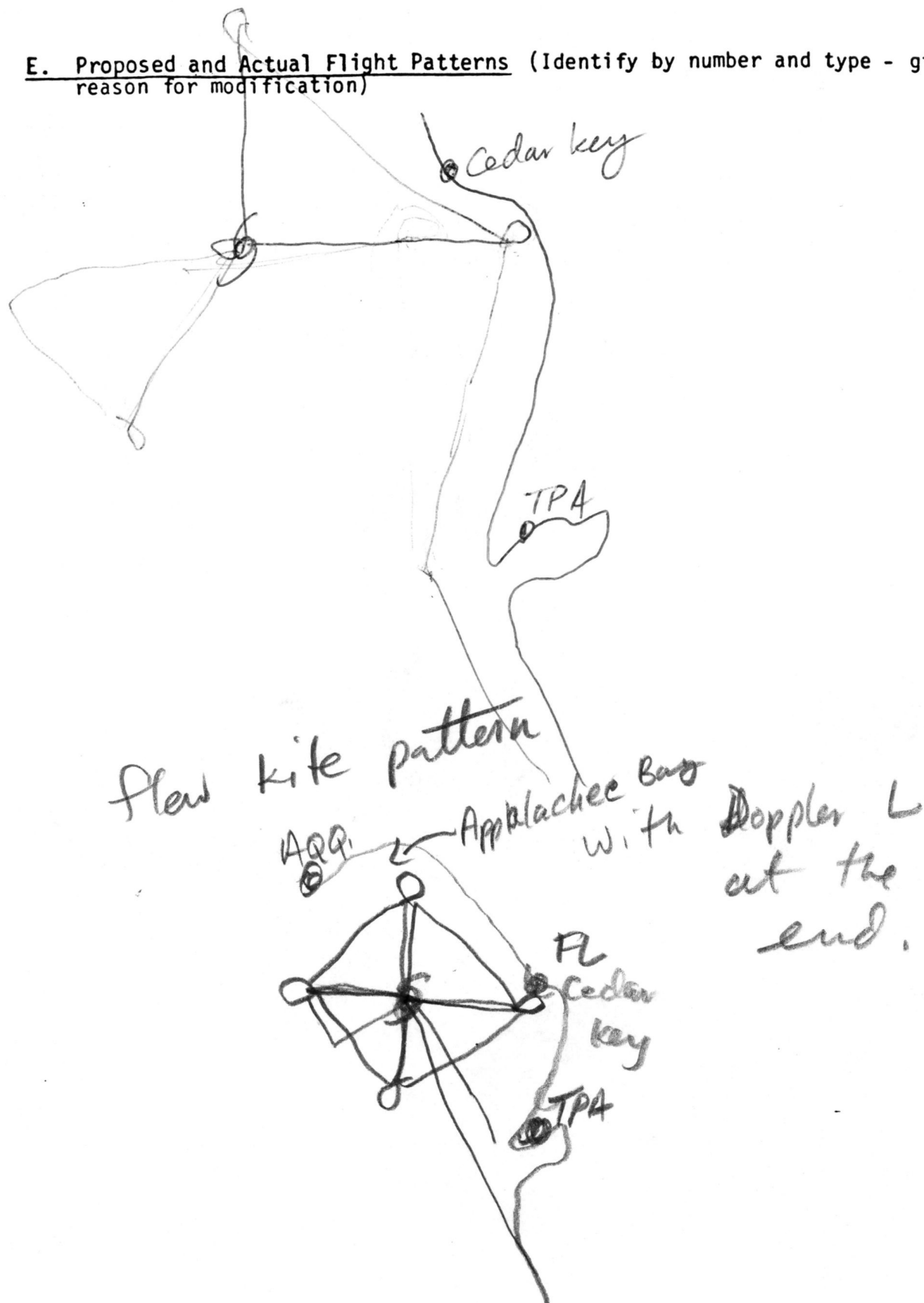
Equipment	Pre Flt	In Flt	Post Flt	Reports Collected
Aircraft	✓	✓	✓	✓
Radar	✓	✓ no LF	no LF	✓
Cloud Physics	✓	none	none	✓
Data Sys	✓	✓	✓	✓
Omegasondes				
AXBT/AXCP				
Gust Probe				
Hot Film				
Photography	✓	none after dark		

REMARKS

doing landfall fixes.
 Carcah was a pain in the Ass
 they wouldn't let us do rolling 4's
 had to do N-S E-W 4's
 did outside turns to get PBL profiles
 50-60 nmileggs.
 No Cloud physics data available (Data System)
 No LF radar (still has antenna problems) problem
 loose wire?
 Doppler worked flawlessly (S. Lord did super)
 after we covered the tape buffer cable with
 tin foil.



E. Proposed and Actual Flight Patterns (Identify by number and type - give reason for modification)



(P)

DATE 31 Aug. 1985

FLIGHT 850831E

LPS Marlin

Lead Project Scientist Event Log

EVENT	TIME*	POSITION	COMMENTS**
T.O	181600	MIA	Doppler out
IP	1908		descent to 5000'
	1911		Doppler working!!
6	1928	28.8 83.9	973 mb LF radar acting up Doppler alright
2	1946	28.8 82.88	turn to heading 305° east of center
3	2001	29.51 83.86	turn south to eye
6	2015	28.8 83.86	in the eye 973 mb head S 45 nmi
4	2035	27.72 83.89	turn head NE to E of center CARCAH inside on N-S E-W legs.
2	205330	28.8 82.86	turn head W to eye. PMS is down
6	2109	28.83 83.85	973 mb head west.
5	212515	28.82 85.05	

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

50

80

53

50.00
48
20

31 Aug. 1985

850831 IZ 6547

(2)
Manus

event	time	event	log. position	comments
4	2145		27.82 83.87	turning N to eye
6	2202	8	28.81 83.83	972 mb N to 3
3	2214		29.61 83.82	heading SW to 5 shortening legs to get fix on time
5	2228		28.85 84.77	turn E to eye Nice Doppler data this pass like in Debby
6	2242		28.83 83.81	971 mb
2	2256		28.81 82.85	turn to 320° to N of center. leg along coast
3	2313		29.84 83.81	turn S to eye
6	2331		28.80 83.79	971 mb
4	2343		28.05 83.79	turn NE to 2
2	2357		28.61 82.88	turn W to 6
6	0011		28.79 83.78	971 mb
5	0028		28.7 84.97	turn SE to 4
4	0048		27.74 83.76	turn N to 6
6	0103		28.67 83.75	969 mb

Event Log

7
640.648

(3)

31 Aug. 1985

850831 I2

Mach

event

time

position

comments.

3

0118

29.7 83.78

turning S to 6
to get ob.

6

0138

28.75 83.8

Doppler tapes running out will use
cloud physics tapes968 mb
heading S

4

015130

27.75 83.73

head NE to 2

2

0208

28.76 82.86

head E to the 6

6

0221

28.68 83.80

967 mb
heading W

5

0236

28.76 84.83

head S to point
30° clockwise from

6

0246

28.26 84.55

start Doppler "L"

(5) pt. (6)
heading NE → 6

6

0300

28.71 83.85

966
head SE

out of turn

in eye at 030225z heading SE

climb at 030504z Doppler still running

10000 030809z

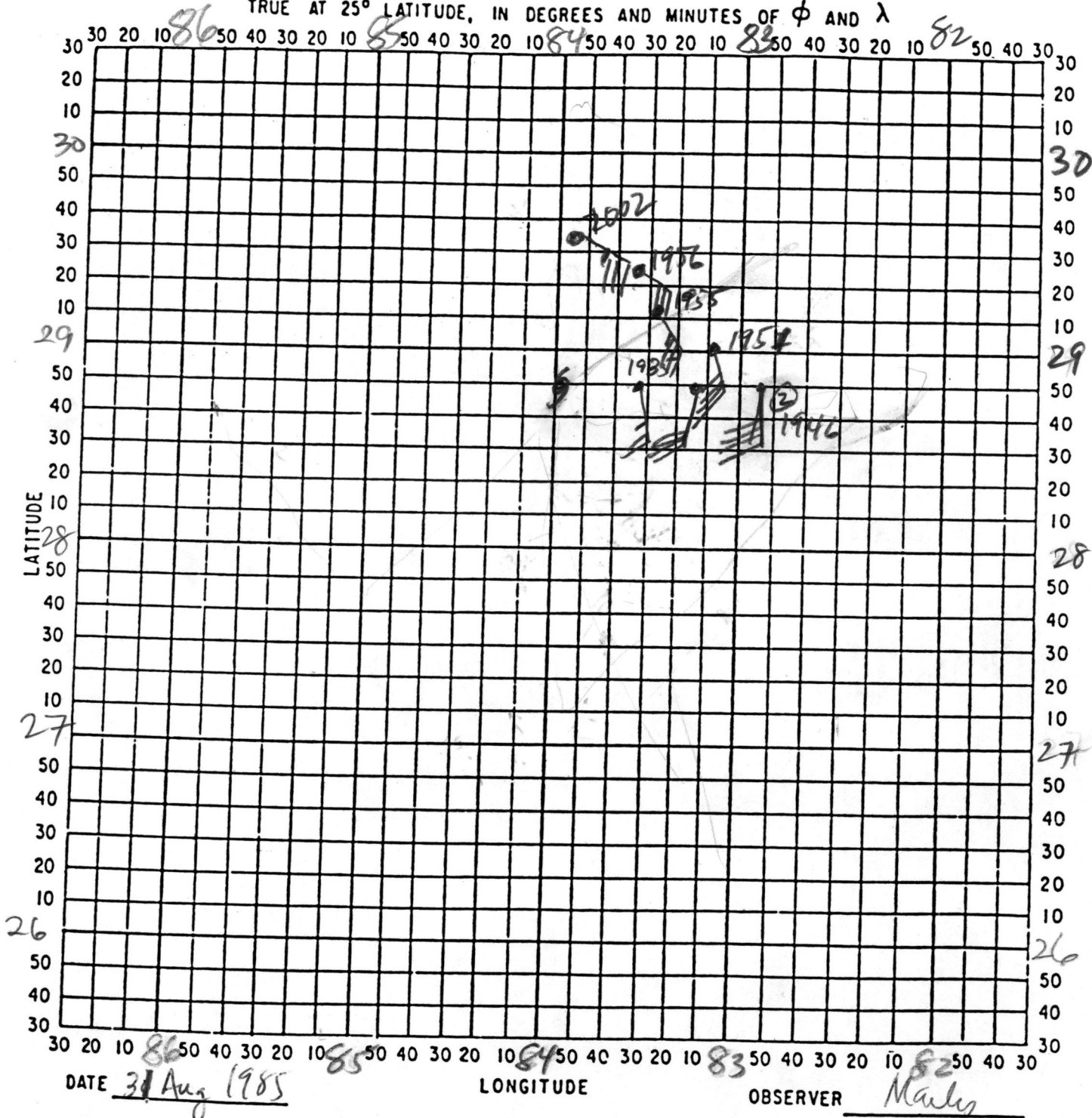


Pattern I

①

HURRICANE RECCO PLOTTING CHART

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



NOTE: Lobe: full degrees according to location of flight area

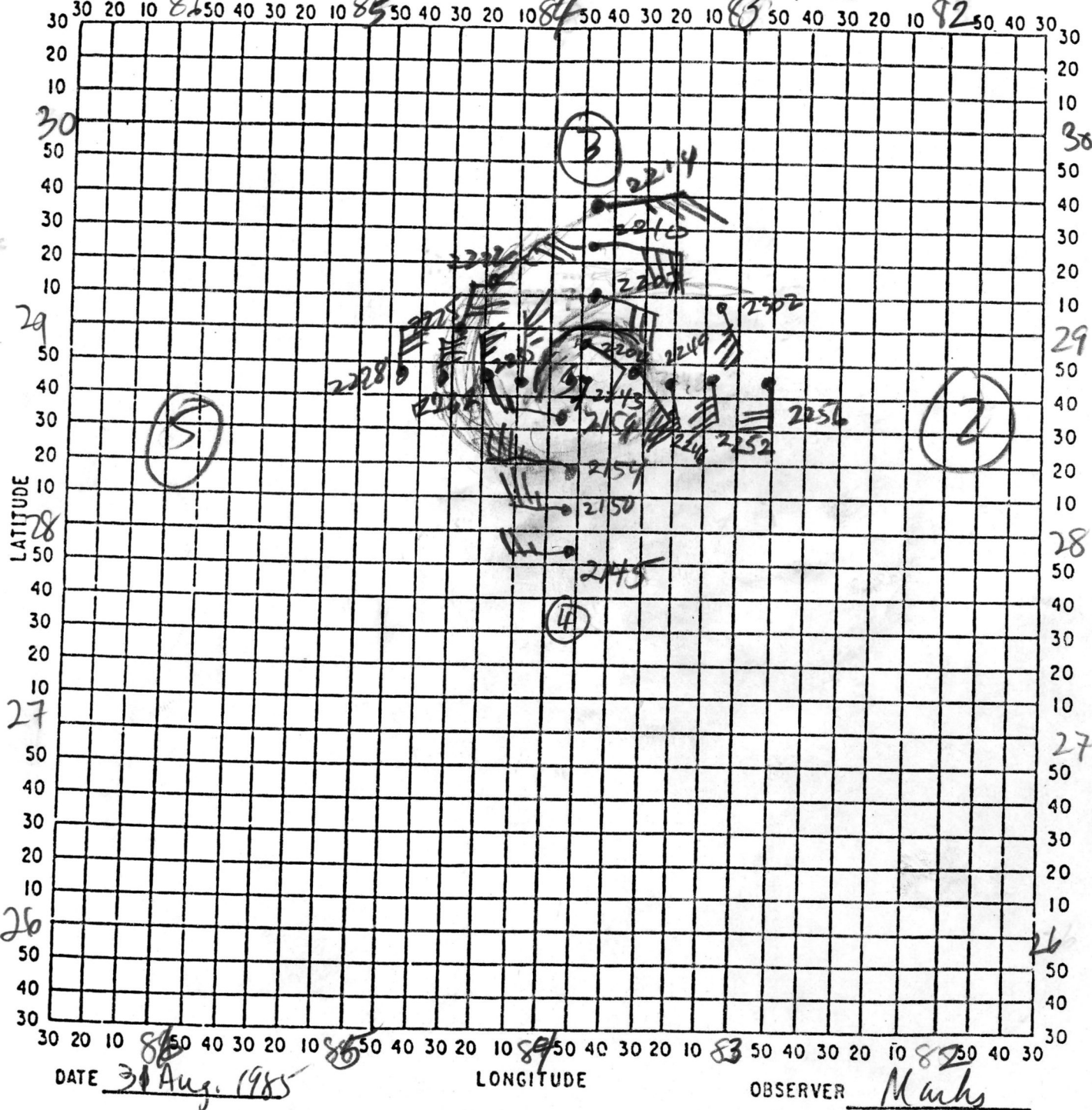


Pattern (2)

(2)

HURRICANE RECCO PLOTTING CHART

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



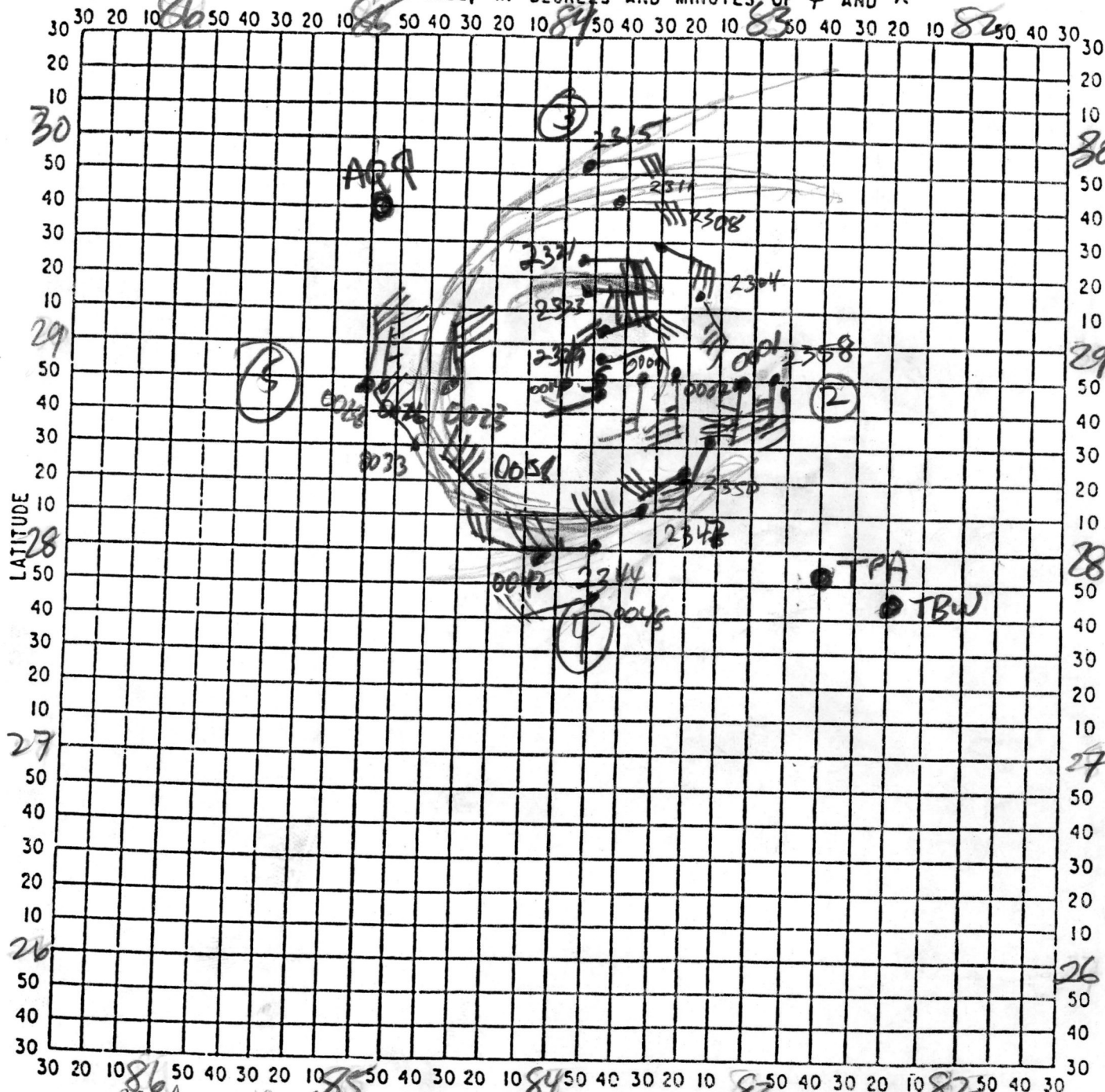
NOTE: Lobe: full degrees according to location of flight area

Pattern 3

3

HURRICANE RECCO PLOTTING CHART

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



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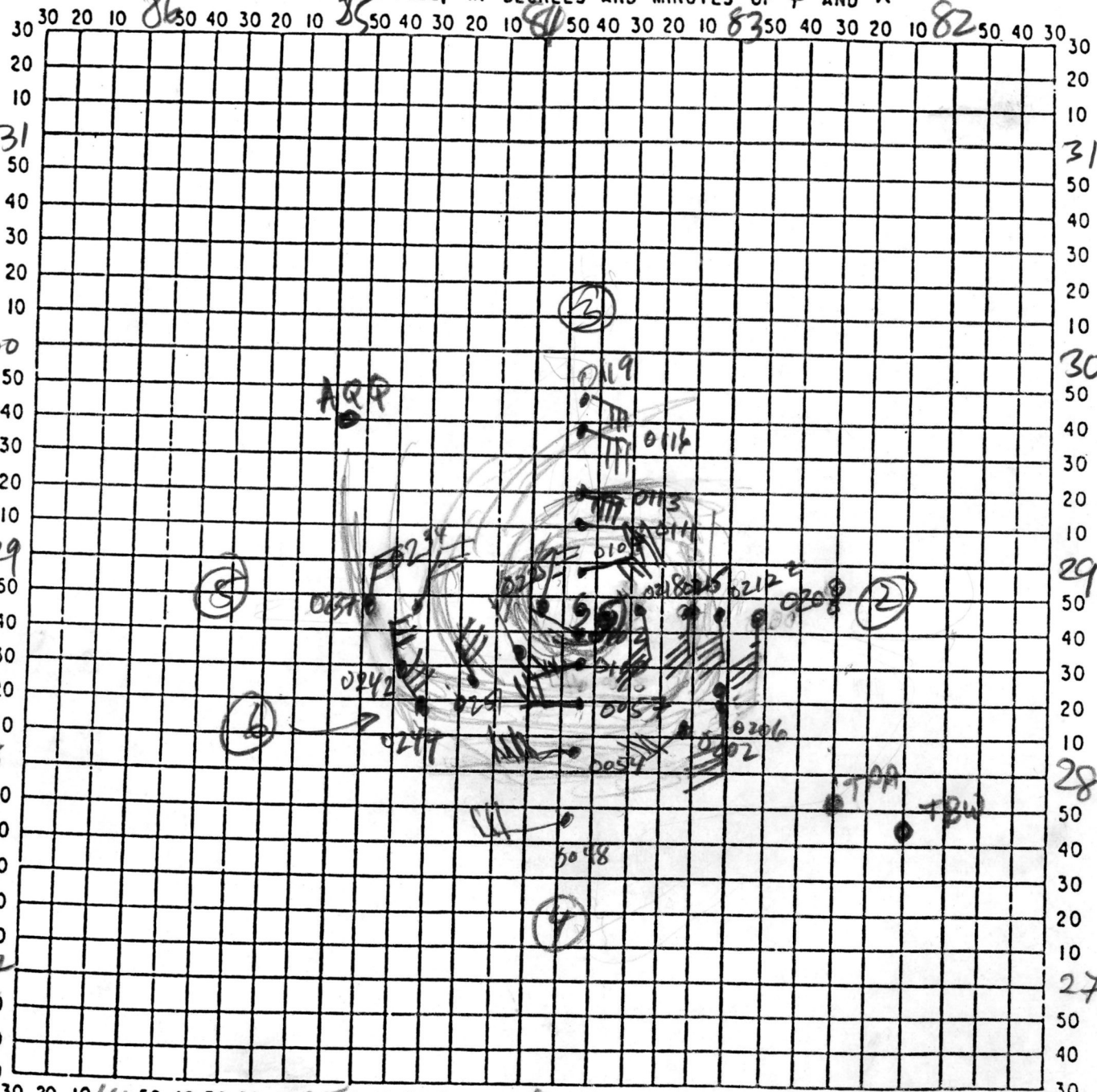
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865

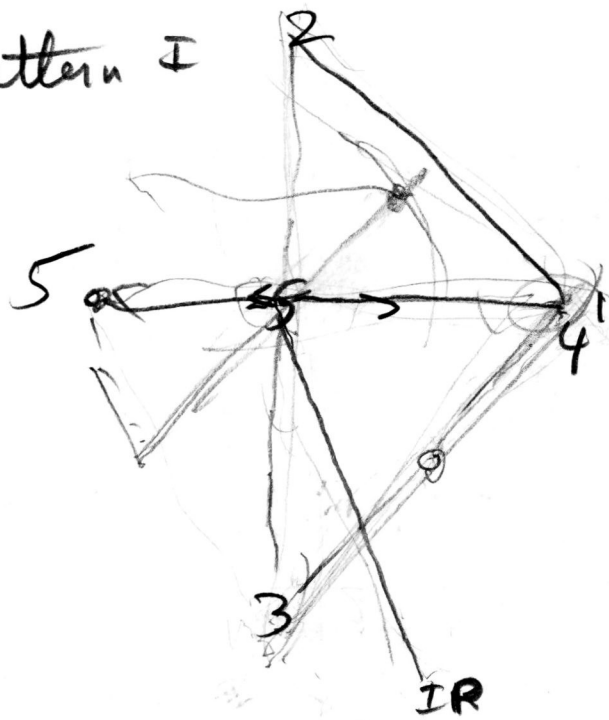


OBSERVER Marley

850831E2

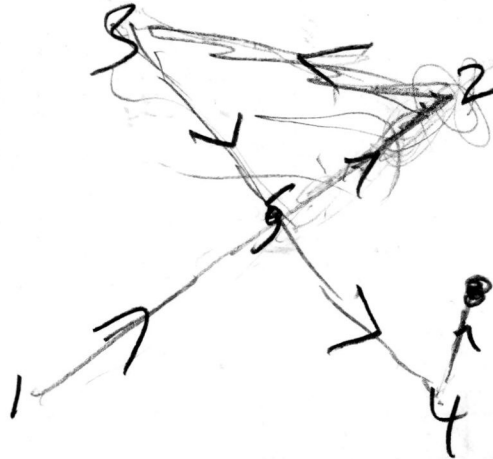
Pattern I

25
SW OPEN



Pattern 2

150



28°45
83°56

Pattern 3

