

19810910H1-LPS

Form E-1
Page 1 of 5

On-board Lead Project Scientist Checklist

DATE 9/10/81

AIRCRAFT 42RF

FLT 810910H1

A. Participants

Function	Participant	Function	Participant
Lead Proj. Sci.	<u>JORGENSEN</u>	Gust Probe	<u>—</u>
Cloud Physics	<u>WILLIS</u>	Omegasonde	<u>—</u>
AXBT	<u>—</u>	Sys Eng	<u>—</u>
Hot Film	<u>—</u>	Data Tech	<u>CONNORS</u>
Radar	<u>MARKS/FEINBERG</u>	El Tech	<u>Berles</u>
Flt Dir/Met	<u>DAVIS</u>	Other	<u>Turner - Pilot</u>
Take Off	<u>MIA</u>	Location	<u>1104 Z</u>
Landing	<u>1940 Z</u>	Location	<u>MIA</u>

B. Past and Forecast Storm Position

Date	Time	Latitude	Longitude	MSLP
<u>9/10</u>	<u>01Z</u>	<u>22.5 N</u>	<u>73.5 W</u>	<u>NA ~40 knts</u>
<u>9/10</u>	<u>06Z</u>	<u>23.5 W</u>	<u>74.0 W</u>	<u>~40 knts</u>
<u>9/10</u>	<u>12Z</u>	<u>24.2 N</u>	<u>75.2 W</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

Long-Term Monitoring - or fly 4
12Z 15Z 18Z fixes

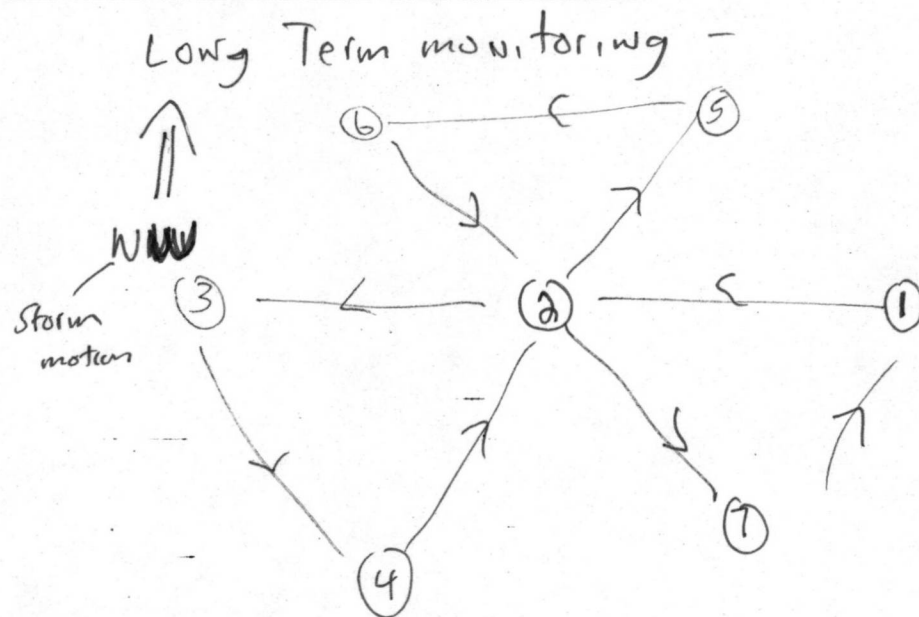
D. Equipment Status

<u>Equipment</u>	<u>Pre Flt</u>	<u>In Flt</u>	<u>Post Flt</u>	<u>Reports Collected</u>
Aircraft	<u>ok</u>	<u>ok</u>	<u>ok</u>	<u> </u>
Radar	<u>ok</u>	<u>ok</u>	<u>ok</u>	<u> </u>
Cloud Physics	<u>ok</u>	<u>ok</u>	<u>No formvar Doppler</u>	<u> </u>
Data Sys	<u>ok</u>	<u>ok</u>	<u>ok</u>	<u> </u>
Omegasondes	<u>-</u>	<u> </u>	<u>-</u>	<u> </u>
AXBT	<u>-</u>	<u> </u>	<u>-</u>	<u> </u>
Gust Probe	<u>-</u>	<u> </u>	<u>-</u>	<u> </u>
Hot Film	<u>-</u>	<u> </u>	<u>-</u>	<u> </u>
Photography	<u>ok</u>	<u>ok</u>	<u>af</u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

REMARKS

Formvar will be tested.
Doppler radar will be tested
Bob Hays and Ed Zipsen onboard as observers

E. Proposed and Actual Flight Patterns



will enter at pt. 6

Because of late takeoff will go directly to forecast storm center at 5 kft P.A. and pick up pattern to pt 7 then.

Following winds to find center

25 ms^{-1} winds to SE in convective band

15 ms^{-1}

E

SW

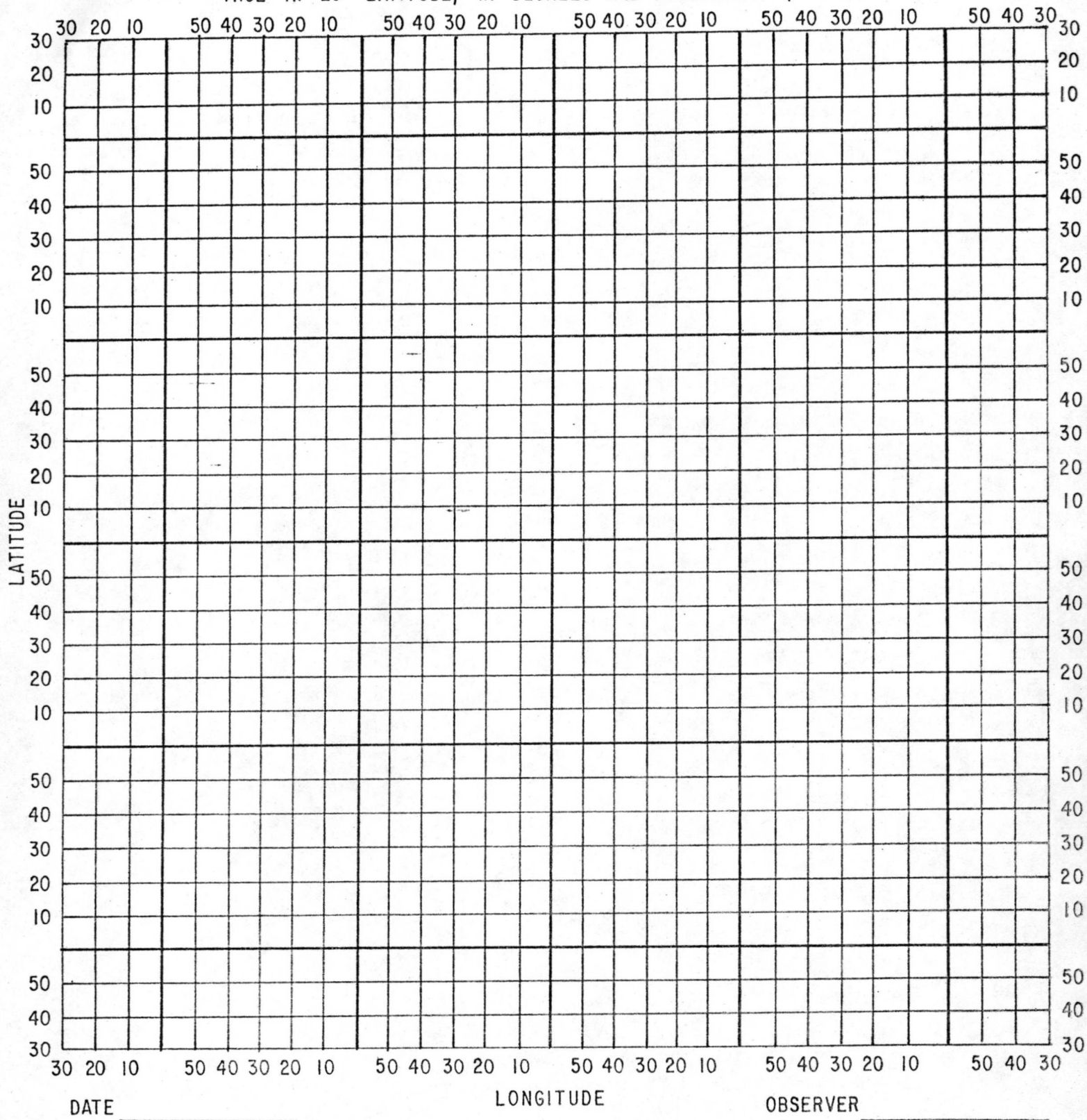
Cutting legs down to 60 n.mi.

Nearly closed off eye



HURRICANE RECCO PLOTTING CHART

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



NOTE: Label full degrees according to location of flight area

FLIGHT LOG

Date: 9/10/81

Flight Identification: 810910H

Aircraft: RFC 42

Departed: 1055Z

Arrived: 2039Z

Purpose: LONG TERM MONITORING PATTERN RECON 12,15,18Z FIXES

Pattern: LONG TERM MONITORING PATTERN

TAPE LOG

<u>TAPE TYPE</u>	<u>NUMBER</u>	<u>FROM [DAY/TIME (Z)]</u>	<u>TO [DAY/TIME (Z)]</u>
RFC Standard	1	1104	2038
Original	1	1104	2039
Knollenberg	14	1115	1923
OTHER			
VTR	2	1147	N/A
RADAR	11	1157	1940

EQUIPMENT STATUS:

<u>SYSTEM</u>		<u>STATUS / UP</u>	<u>DOWN</u>	<u>NOT USED</u>	<u>REMARKS</u>
NAV	INE 1	X			
	INE 2	X			
	ONE				
	DOPL				
RADAR	NOSE	X			BAD NOSE DISPLAY
	LF	X			
	TAIL	X			
	DATA SYSTEM	X			
RAMS	DATA SYSTEM	X			
	TOTAL TEMP. 1	X			
	TOTAL TEMP. 2	X			
	DEWPOINT	X			
	ATTACK ANGLE	X			
	SLIP ANGLE	X			
	ABS. PRESS.	X			
	DIFF. PRESS.	X			
	RADAR ALT.	X			
	J & W	X			
PMS	OAP 2DP	X			
	OAP 2DC	X			DIODES STUCK MOST SPEED #1
	FSSP 100	X			
	DATA SYSTEM	X			
IPC					
FOIL				X	
CO ₂ RADIOMETER		X			
MICROWAVE RADIOMETER		X			
SFC. RADIOMETER		X			
FORMWAR				X	
PHOTOGRAPHY	FWD	X			
	LS	X			
	RS	X			
	DWN	X			
	RADAR	X			
AXBT	TUBES			X	
	RECEIVERS			X	
ODW				X	
SEEDER				X	

DATE 810910H1

FLIGHT GERT

LPS JORGENSEW

Lead Project Scientist Event Log

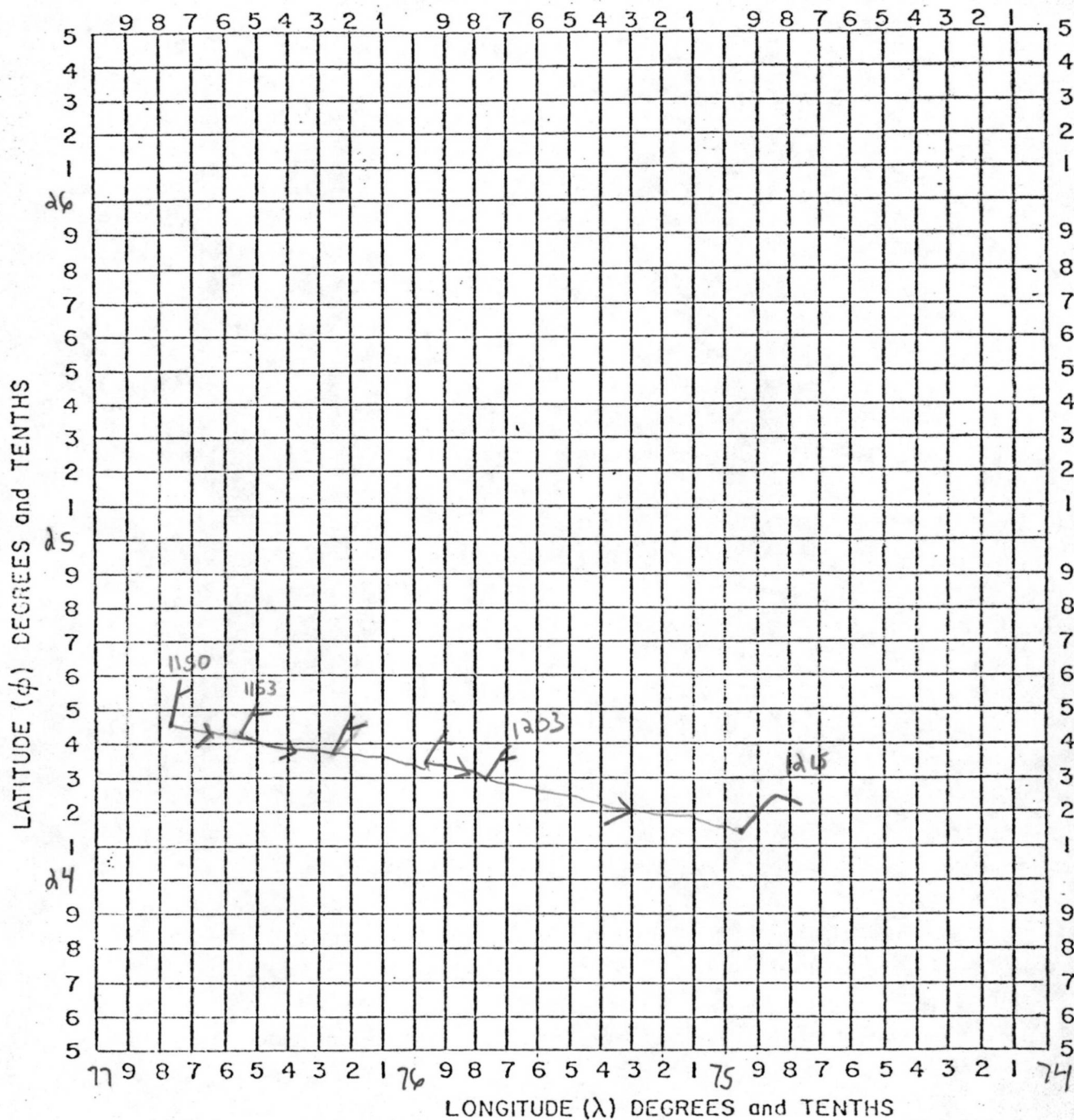
EVENT	TIME*	POSITION	COMMENTS**
Takeoff	1104 Z	MIA	Initial cruise altitude 16kft Late takeoff - no time for TAS cal.
Descent to 5kft	1147 Z	24.57 77.22	TRK 103° Wind calm
Wind shift	1230 Z	23.47 74.36	MAX wind ~18ms ⁻¹ sfc wind looks ~25ms ⁻¹ 1000mb
Head to pt 7	1235 Z	23.5 74.4	STC P
Rt 7	1257	22.35 73.64	
pt 2	131345	23.42 72.95	
CNTR	1336 Z	23.51 74.47	1000mb sfc P
PT 3	1347 Z	23.5 75.9	TRK 158°
pt 4	1400 Z	22.87 75.03	
CNTR	1418 Z	23.87 74.41	
pt 5	1432 Z	24.7 74.3	
pt 6	1441	24.7 74.9	
CNTR	1456	24.03 74.53	999mb SP
pt 7	1511 Z	23.18 74.05	
pt 1	1524	24.0 73.5	descending to 1000ft
pt 1	1529 Z	24.1 73.3	pt 1 1000ft
CNTR	1545 Z	24°09' 74°28'	999mb SP
pt 3	1602	24.09 75.63	climb to 5kft
pt 4	1614	23.33 75.11	
CNTR	1635	24.44 74.72	Missed wind center badly 999mb
pt 5	164550	25.22 73.82	SP

*Log times of all significant altitude changes, turns, and eye fixes

**New altitude, heading, center position, etc.

<u>EVENT</u>	<u>TIME</u>	<u>Position</u>	<u>Comments</u>
13 Pt b	170230Z	25.23 75.12	
14 Cntr	171700	24.58 74.48	999mb SP
Pt 7	1740	25.89 73.88	
15 Pt 1	1754	24.58 73.49	Desend to 1500 ft Max wind ~37ms ⁻¹
CNTR	181800	24°52' 74°28'	997mb SP
16 At Pt 3	183340	24.87 75.55	climb to 5kft
17 CNTR	185820	24.99 74.46	997mb SP
18 At Pt 1	190412	25.00 73.5	turning 180°
19 CNTR	1919	25.04 74.48	996mb SP
20 Pt 3	1935	25.03 75.59	

HURRICANE RECCO PLOTTING CHART



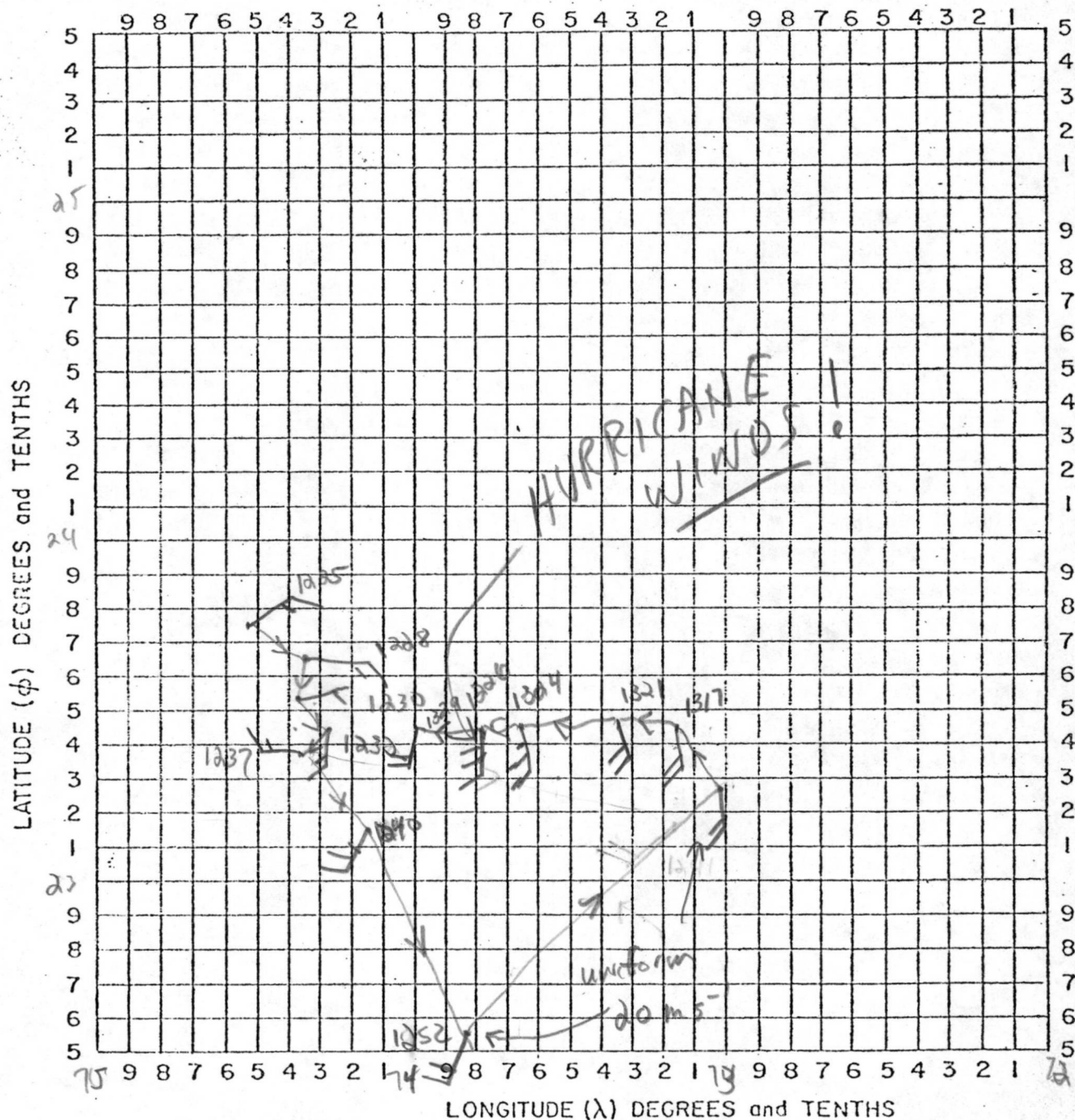
DATE 810910H1 GERT

OBSERVER Jorgensen

NOTE: Label full degrees according to location of flight area *

①

HURRICANE RECCO PLOTTING CHART



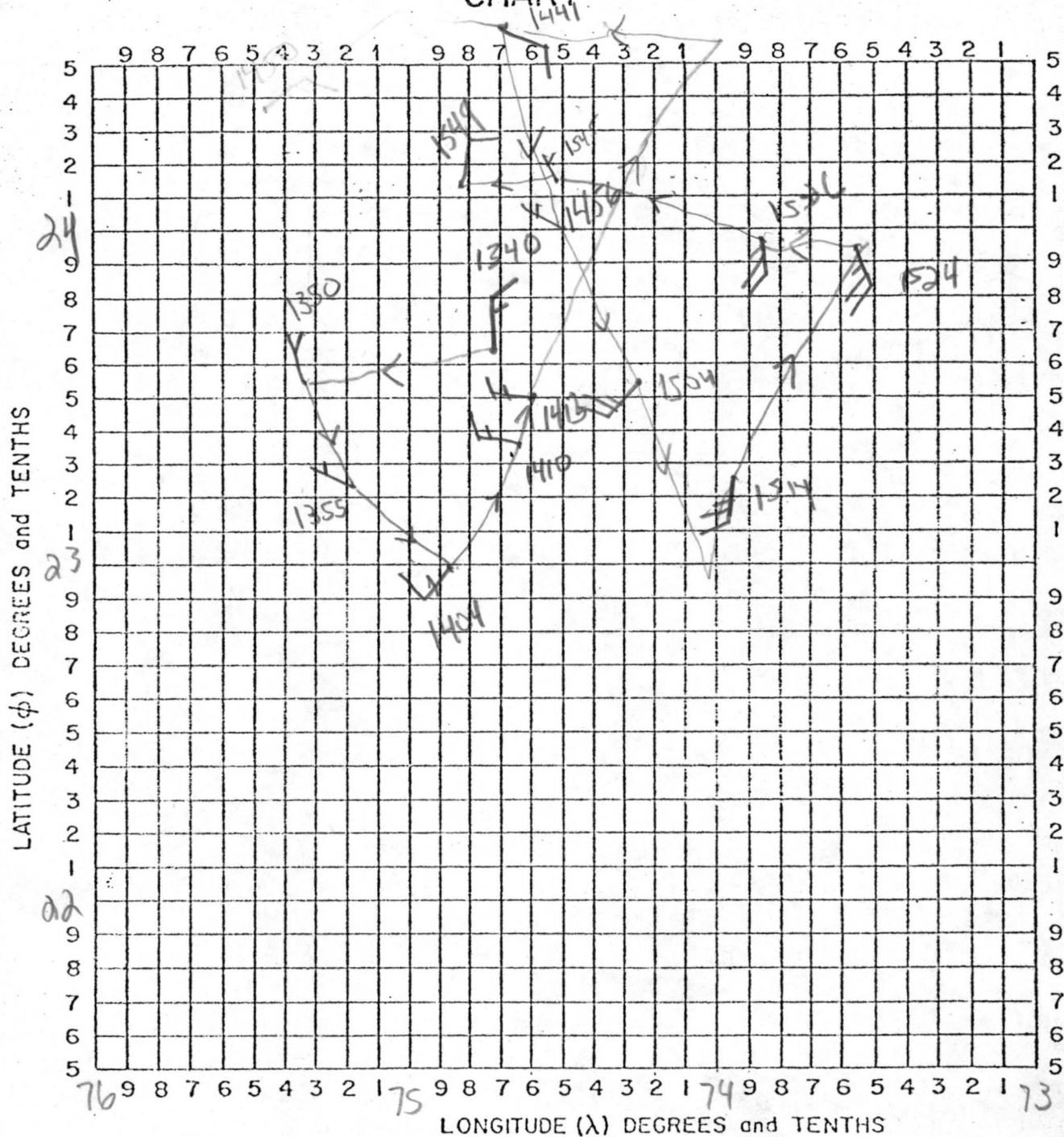
DATE 810910 H1

OBSERVER JORGENSEN

NOTE: Label full degrees according to location of flight area

(2)

HURRICANE RECCO PLOTTING CHART

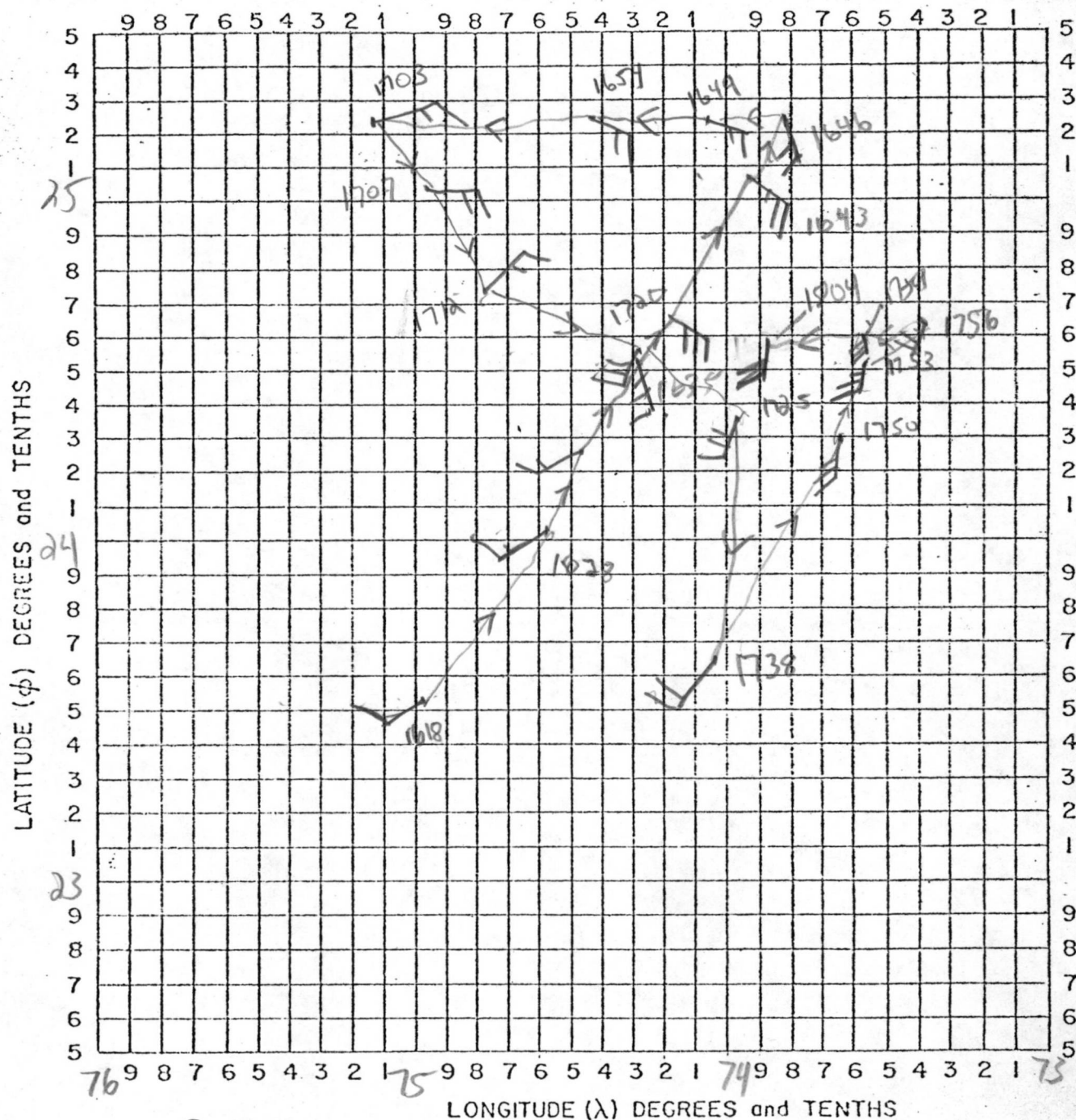


DATE 8/09/04
OBSERVER JORGENSEN

NOTE: Label full degrees according to location of flight area

3

HURRICANE RECCO PLOTTING CHART

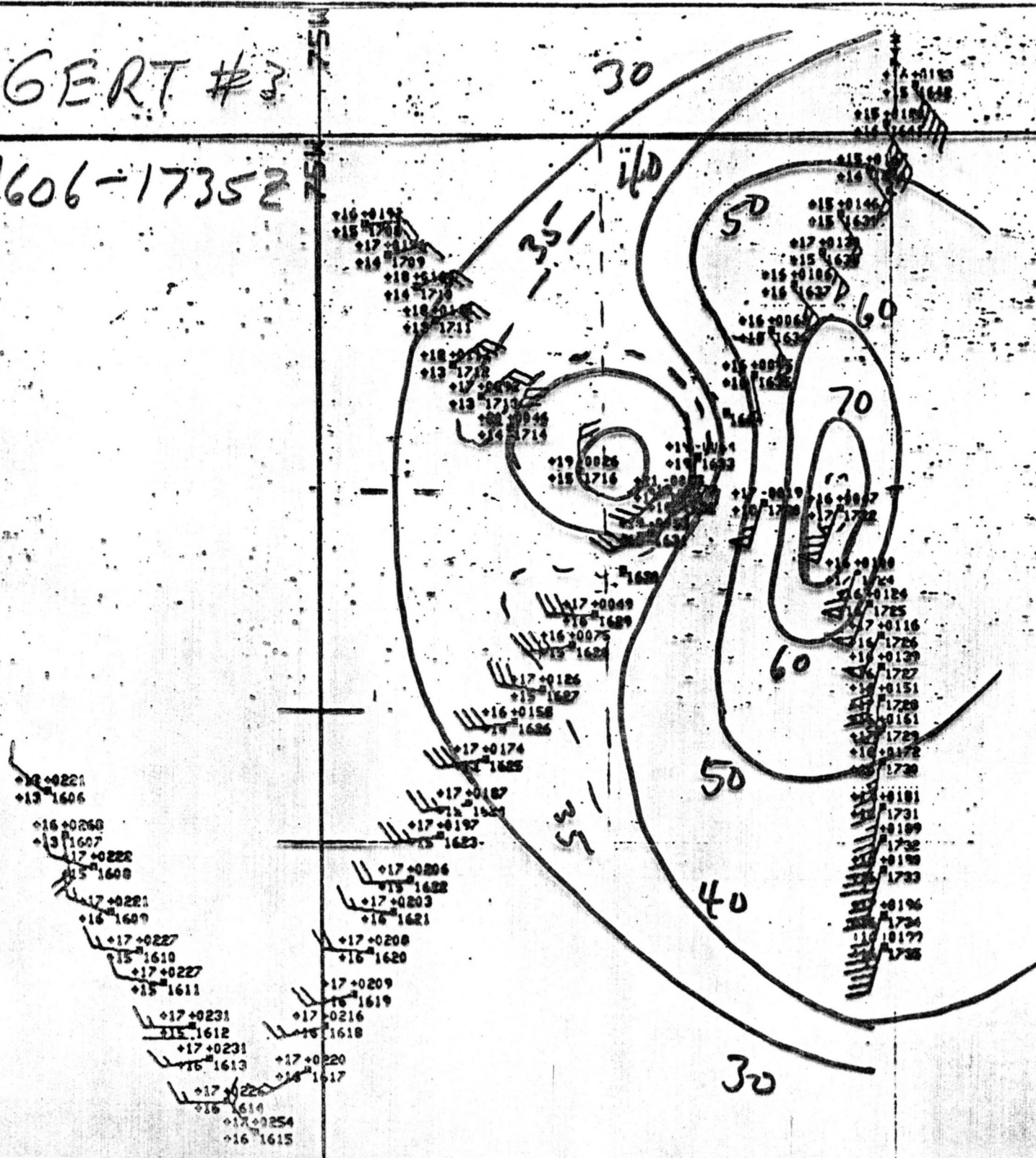


DATE 810910H1
OBSERVER JORGENSEN

NOTE: Label full degrees according to location of flight area

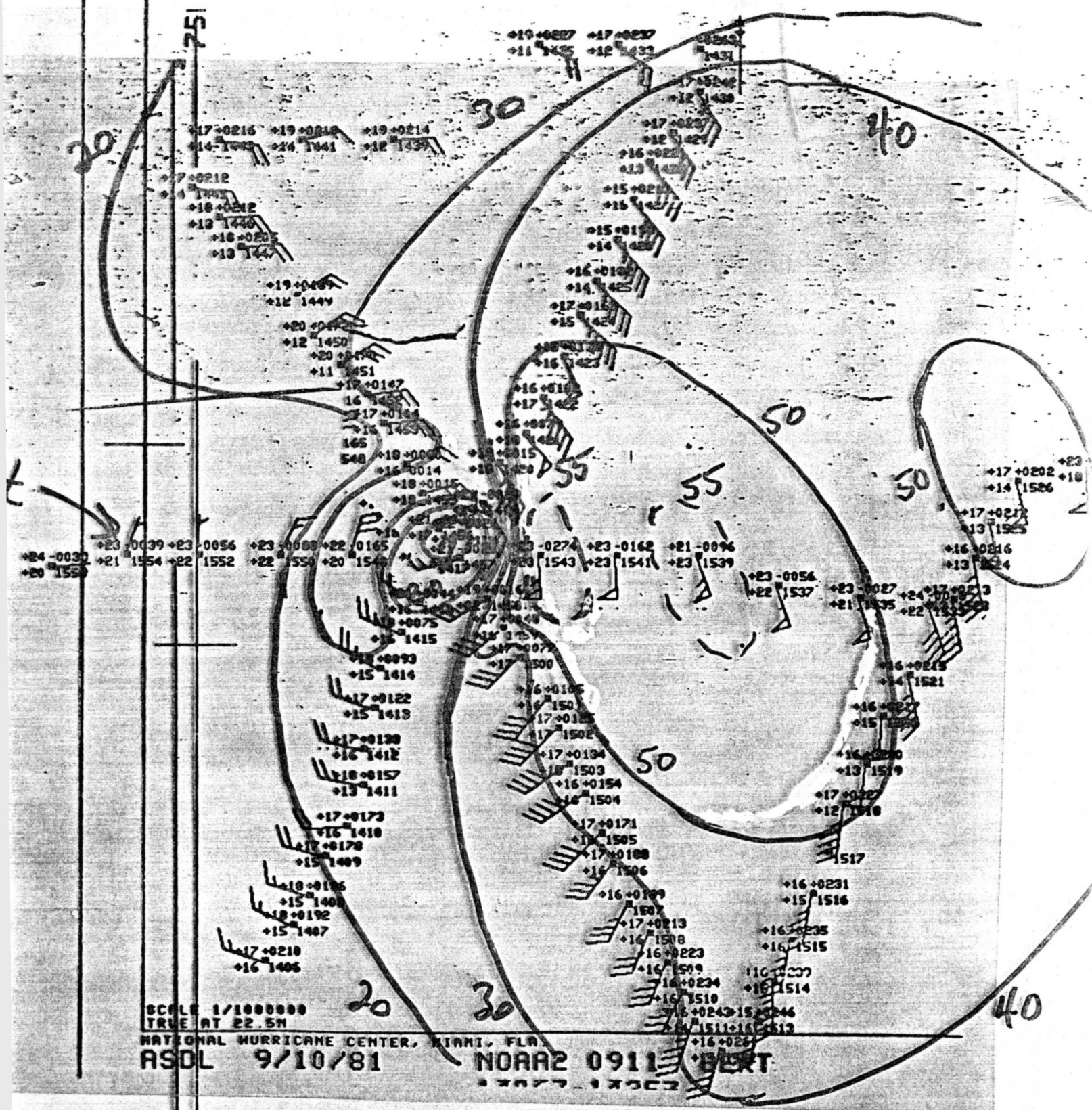
9

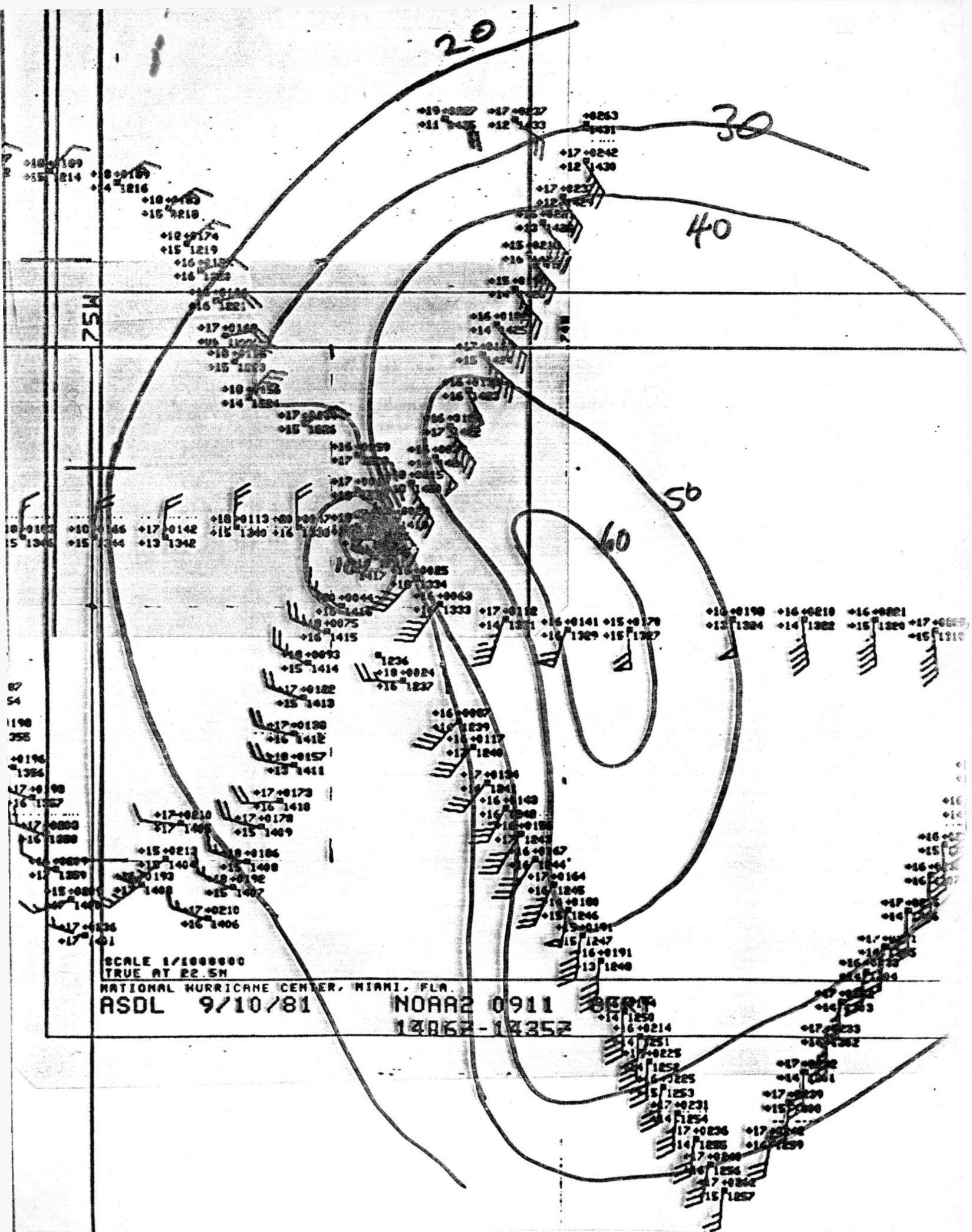
1606-17352



1405-1605 Z

1405-1605 Z





GERT

810910H1

810911I1

10:55:00	23.15N	74.29W	13:05:00	29.21N	71.74W
12:30:05	23.48	74.36	15:15:12	29.66	71.32
14:17:50	23.86	74.45	18:06:36	30.42	70.71
14:56:09	24.02	74.53	20:15:35	30.70	70.35
15:44:30	24.17	74.51	23:05:00	31.29	69.79
18:17:50	24.87	74.45			
19:18:00	25.07	74.39			
20:45:00	25.44	74.34			

810910I1

810911H2

19:25:00	25.03	74.30	21:45:00	30.93	69.88
21:03:45	25.54	74.14	00:20:00	31.41	69.51
23:58:40	26.45	73.86	01:23:30	31.57	69.37
03:02:00	27.21	73.50	02:30:37	31.76	69.21
05:10:00	27.74	73.25	03:28:18	32.00	68.97
			04:11:07	32.16	68.94
			04:59:06	32.28	68.84
			07:50:00	32.81	68.43

810911H1

810912I1

04:25:00	27.06	73.45	05:45:00	32.44	68.56
06:13:10	27.50	73.15	09:00:10	32.92	67.82
09:08:29	28.25	72.64	09:54:30	33.05	67.62
12:03:28	28.94	72.17	11:42:10	33.32	67.20
14:15:00	27.06	73.45	15:22:00	33.86	66.36

CENTER FIXES

GERT 810910H1 —

123005	23.48N	74.36W
141750	23.86N	74.45W
145609	24.02N	74.53W
154430	24.17N	74.51W
181750	24.87N	74.45W
191800	25.07N	74.39W

GERT 810910I1 —

210345	25.54N	74.14W
235840	26.45N	73.86W
030200	27.21N	73.50W

GERT 810911H1 —

061310	27.50N	73.15W
090829	28.25N	72.64W
120328	28.94N	72.17W

CENTER FIXES

GERT 810911I1 —

151512	29.66N	71.32W
180636	30.42N	70.71W
201535	30.70N	70.35W

GERT 810912H1 —

002000	31.41N	69.51W
012330	31.57N	69.37W
023037	31.76N	69.21W
032818	32.00N	68.97W
041107	32.16N	68.94W
045906	32.28N	68.84W

GERT 810912I1 —

090040	32.92N	67.82W
095430	33.05N	67.62W
114210	33.32N	67.20W

SEPT. 1981

DATE / TIME	N		W		
	DEC LAT	MIN	DEC LAT	MIN	
07/1500	15	43	57	48	A/F
07/1715	15	27	58	42	"
08/1055	15	25	62	13	"
08/1105	16	38	63	48	"
08/1350	16	59	64	34	"
08/1620	17	19	65	04	"
08/1711	17	29	65	09	"
10/0226	22	25	72	49	"
10/0640	22	49	73	14	"
10/0908	22	58	74	29	A/F
10/1230	23	28	74	20	NOAA 2
10/1418	23	52	74	15	"
10/1456	24	01	74	30	"
10/1545	24	08	74	31	"
10/1819	24	52	74	28	"
10/1918	25	04	74	22	NOAA 2
10/2103	25	34	74	10	NOAA 3
10/2359	26	18	73	56	"
11/0303	26	56	73	33	NOAA 3
11/0610	27	26	73	09	NOAA 2
11/0909	28	10	72	35	"
11/1202	28	50	72	07	"
11/1515	29	41	71	20	NOAA 2
11/1806	30	25	70	44	NOAA 2 & 3
11/2015	30	41	70	21	NOAA 2
12/0020	31	25	69	29	"
12/0122	31	34	69	18	"

