

19891015I-LPS

E.2 Lead Project Scientist (On-Board)

891015I
Serry

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 Check List

Date 10/15/89 Aircraft 43RF Flight ID 891015I

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Marls</u>	Flight Director	<u>Damiano</u>
Cloud Physics	<u></u>	Pilots	<u>Philipborn/Ticknor</u>
Radar	<u>Griffin</u>	Navigator	<u>Nokatis</u>
Doppler	<u>Fewer</u>	Sys. Engr.	<u>Wade</u>
Photographer	<u>Ramsay</u>	Data Tech.	<u>Goldstein</u>
Omegasonde	<u></u>	El. Tech.	<u>Lynch/Leyva</u>
AXBT/AXCP	<u></u>	Other	<u>McFadden</u>
	<u>Guzman</u>		
Take-Off	Location <u>MIA</u>	Landing	Location <u></u>

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>10/15/0515Z</u>	<u>26° 19"</u>	<u>93° 23"</u>	<u>994</u>	<u>54</u>
<u>0656Z</u>	<u>26° 32"</u>	<u>93° 26"</u>	<u>995</u>	<u>57</u>
<u>0825Z</u>	<u>26° 50"</u>	<u>93° 40"</u>	<u>995</u>	<u>46</u>
<u>1002Z</u>	<u>27° 14"</u>	<u>93° 53"</u>	<u>993</u>	<u>60</u>
<u>Post 15Z</u>	<u>27° 50"</u>	<u>94° 10"</u>	<u></u>	<u></u>

C. Mission Briefing

recd fig 4's off Tex/LA coast

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	✓	✓	✓
Radar	✓	*TA Xmitter problem	✓
Cloud physics	✓	✓	✓
Data system	✓	✓	✓
Omegasondes	—	—	—
AXBT/AXCP	—	—	—
Doppler	✓	TA Xmitter problem	✓
Photography	✓	✓	✓

tapes

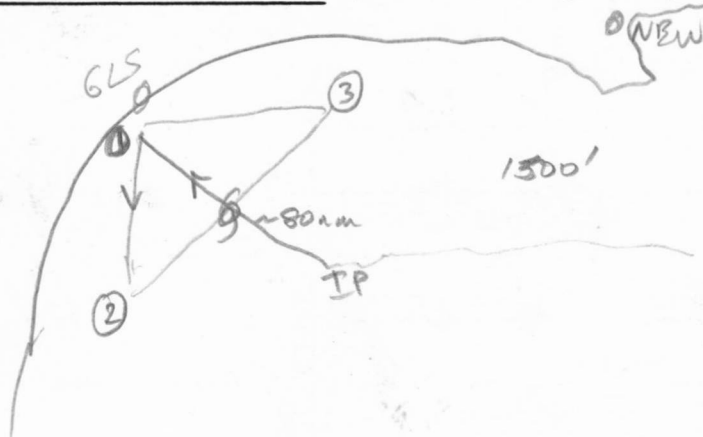
5

REMARKS:

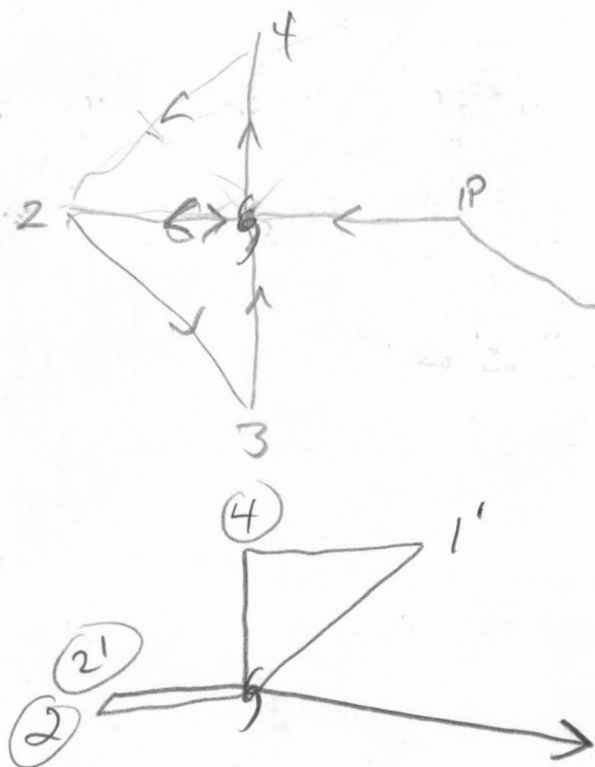
TA xmitter not on frequency
tried to fix problem by changing RT
No Luck!

TA Reflectivities are low and Doppler only where
stronger echoes. Not too bad around the eyewall
will leave problems (holes) out in the periphery.

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



E. II. Actual Flight Pattern



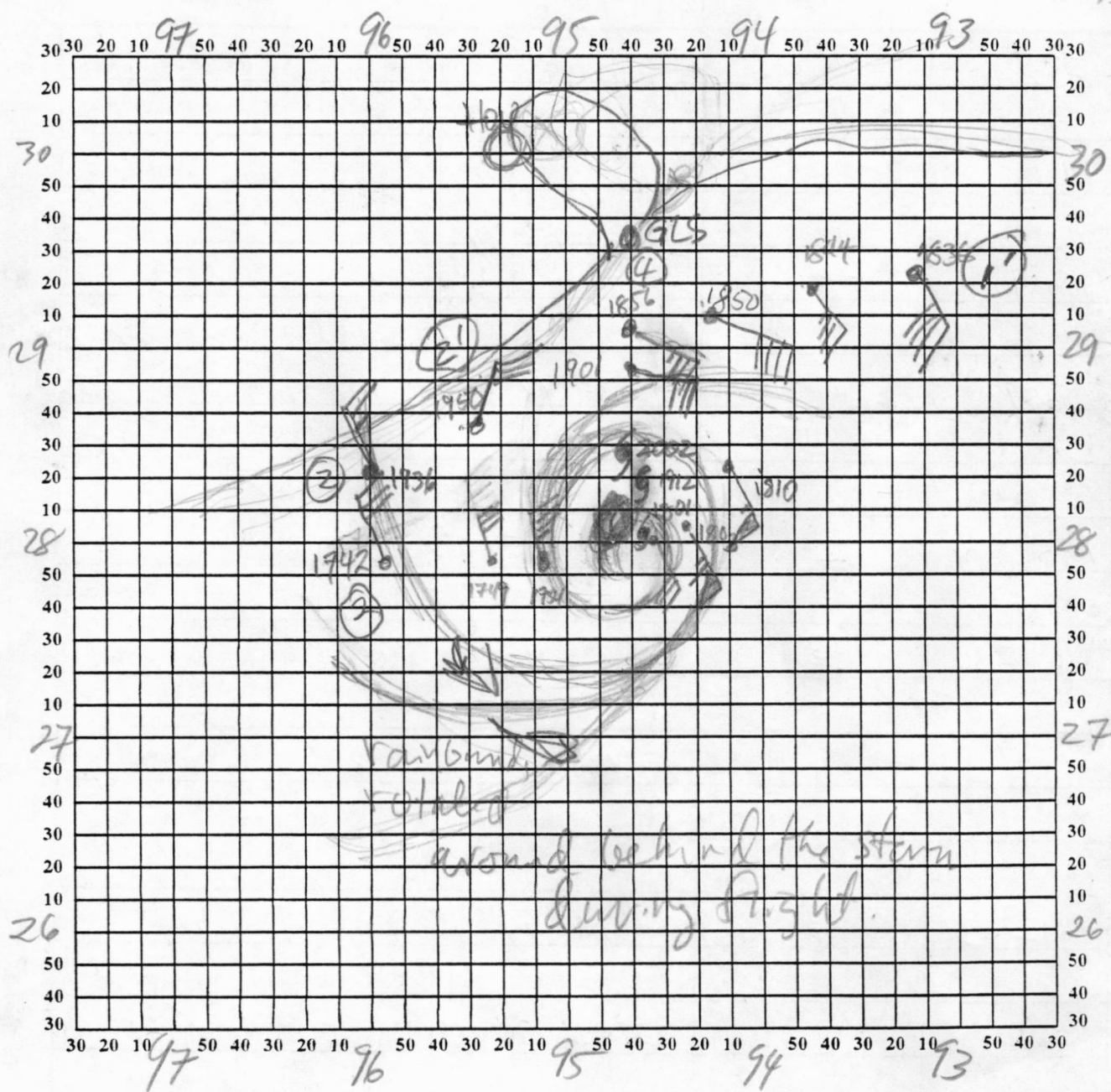
(2)

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date 10/15/89 Longitude 891015I Observer Markus

1500'



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

①

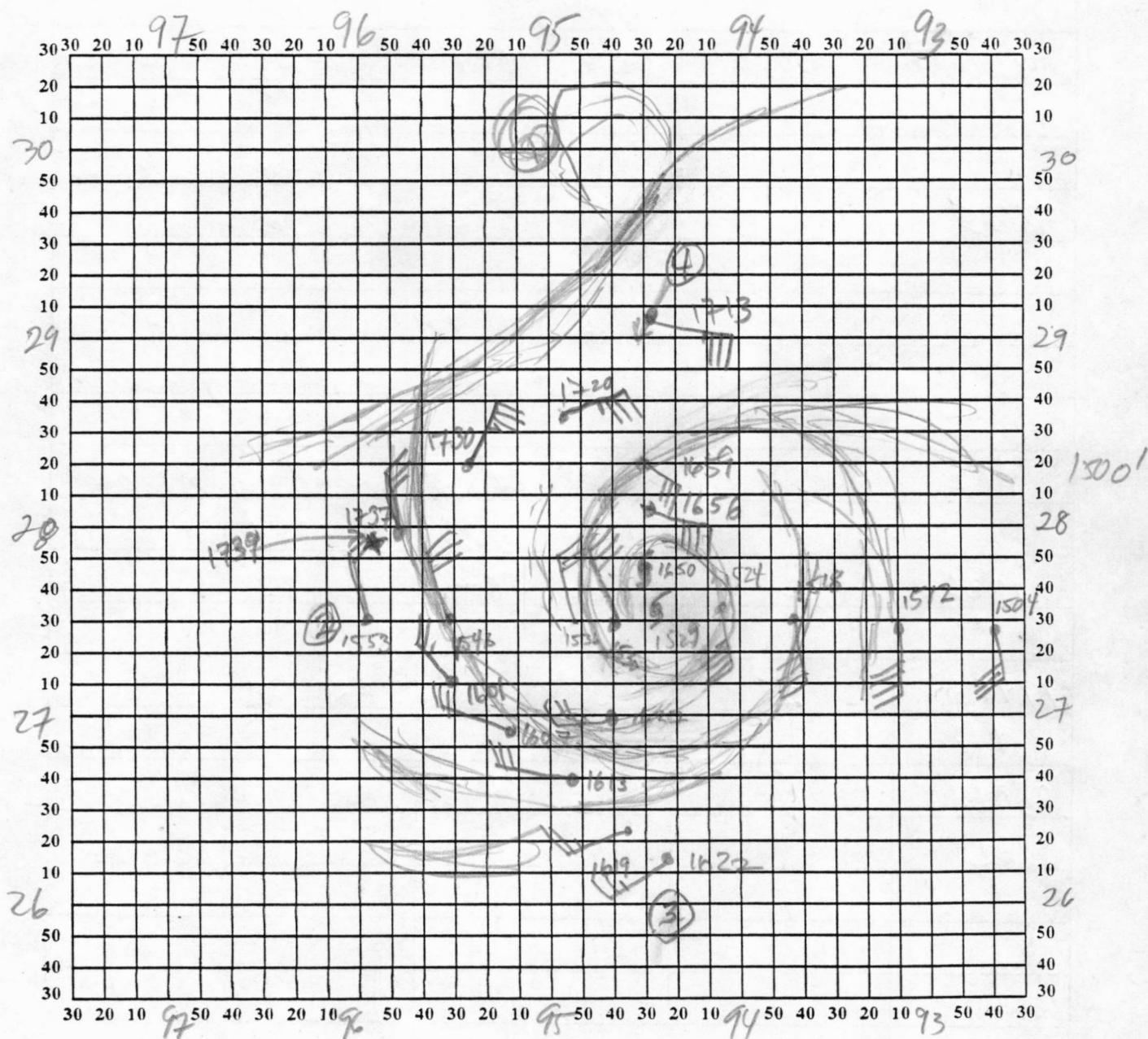
Lead Project Scientist Event Log

Date 10/15/89 Flight 891015I LPS Marler

Time	Event	Position	Comments
123321	TO	MIT	
1449			start descent TK 300° to G to 1500'
1504	IP (1)	27°29" 93°38" 4" ~100 nm E of G	TK 270 to G
1529	G	27°33" 94°27"	989 mb 60 kts TK 270° secondary wind max 45 nm E of G TA reflectivities look low Znly max on W also ~40 nm E of G
155235	②	27°30" 95°57'	TK 135 to pt S of G TA R/T worked on Not much better tried swapping R/T
162230	③	26°14" 94°25"	TK 350° to G No luck!
1650	G	27°48" 94°30"	988 mb 50 kts pk reflectivity to S side TA Reflectivities are still low maybe Cal tube not clean on terminology
171223	④	29°7.5" 94°27"	TK 225 to pt W of G
173950	②	27°54" 95°56"	TK 090 to G just outside spiral band W of G

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date 10/15/89 Longitude 891015Z Observer Mark



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

Lead Project Scientist Event Log

storm motion
~350/12kts

Date 10/15/89

Flight 891015 I

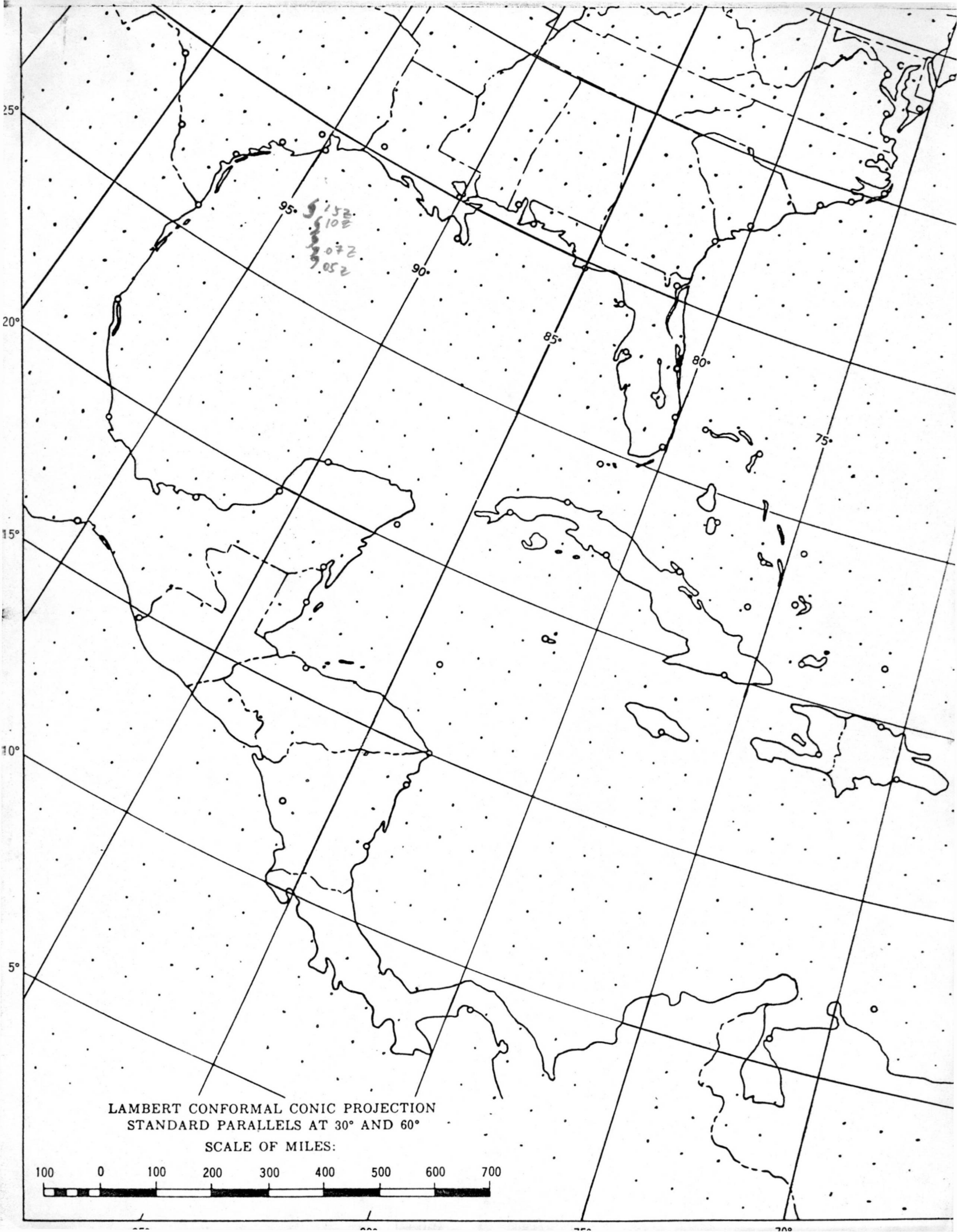
LPS Murks

(2)

Time	Event	Locom Position	Comments
180145	6	28°04' 94°34"	986mb 69kts NE side
			real suppressed NE 85
			35-40km from center
1835	1'	29°18' 93°12'	TK 260 to pt N of 5
1856	4	29°06' 94°39.7"	TK 180° to 5
		~1900Z	supercell going off NW
			strong z's N
1912	6	28°17' 94°35'	outside turn TK 270
			954mb
193600	2	28°20' 96°02.9"	TK 055 up ^{wind up} coast
194830	2'	28°38.9' 95°26.0"	TK 100 climb to 5000'
194830			
200140	6	28°28' 94°43"	TK 090 have 982 mb
2002			climb to go home

1945





LAMBERT CONFORMAL CONIC PROJECTION
STANDARD PARALLELS AT 30° AND 60°

SCALE OF MILES:

