

19890920Z1 - LPS

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. Obtain a copy of the 10-s flight listing from the OAO 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.

On-Board Lead Project Scientist Check List

Date 20SEP89 Aircraft N432F Flight ID 890920I

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>WILLOUGHBY</u>	Flight Director	<u>DAMIANO</u>
Cloud Physics	<u> </u>	Pilots	<u>GENZLINGER/MALIN</u>
Radar	<u>BLACK</u>	Navigator	<u>WILSON</u>
Doppler	<u> </u>	Sys. Engr.	<u>ROLES</u>
Photographer	<u> </u>	Data Tech.	<u>THOMSON</u>
Omegasonde	<u>FRANKLIN, MARK S</u>	El. Tech.	<u>LEVAI</u>
AXBT/AXCP	<u>SHAPIRO</u>	Other	<u> </u>

Take-Off 20/1720 Location MIA Landing Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>20/1000</u>	<u>24.9</u>	<u>70.5</u>	<u> </u>	<u> </u>
<u>20/18</u>	<u>26.0</u>	<u>71.4</u>	<u> </u>	<u> </u>
<u>21/00</u>	<u>27.8</u>	<u>72.9</u>	<u> </u>	<u> </u>
<u>21/18</u>	<u>29.2</u>	<u>74.8</u>	<u> </u>	<u> </u>
<u>23/06</u>	<u>33.5</u>	<u>81.0</u>	<u> </u>	<u> </u>

C. Mission Briefing

FLY SYNOPTIC FLOW WITH FLG 4
ON CYCLONE 6

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	↑	↑	↑
Radar	↑	↑ ↓ ①	↑
Cloud physics	↑	↑	↑
Data system	↑	↑	↑
Omegasondes	↑	↑	↑
AXB T/AXCP	↑	NOT OPERATED	↑
Doppler	↑	↑	↑
Photography	↑	↑	↑

REMARKS:

① LF RADAR ↓ FROM START. BOTH
LF & TA OFF IN ORDER TO WORK
ON LF. THEN TA ONLY FROM 1908.

BOTH RADARS OFF 2215 → 2249

SWITCHED R/T, BOTH RADARS ↑, ON 2249

USED 8 RADAR TAPE, 8 CLOUD
PHYSICS TAPE 26 ODDs

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

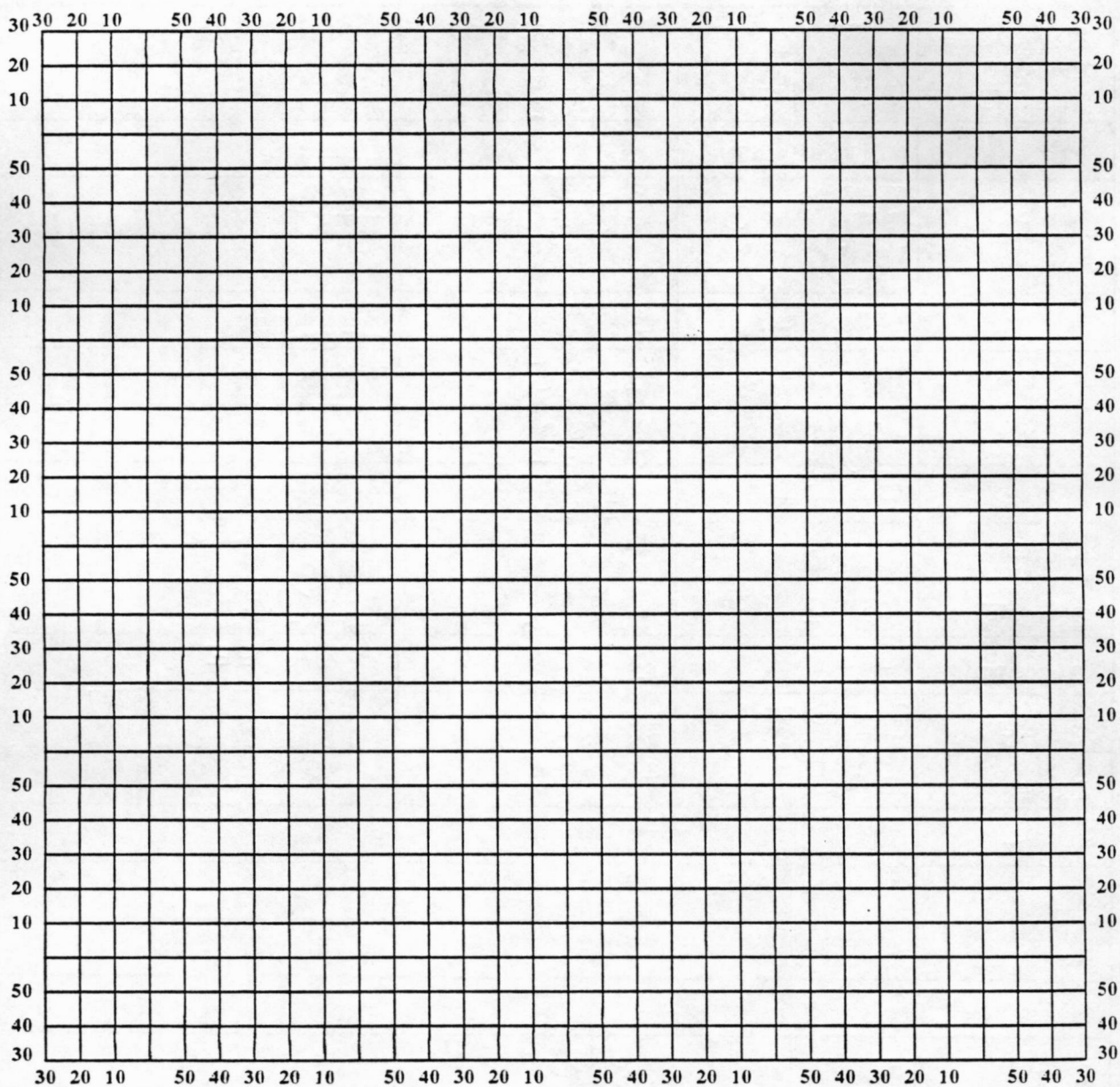
SEE ATTACHED SHEET

E. II. Actual Flight Pattern

Hurricane Recco Plotting Chart

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

Date _____ Longitude _____ Observer _____



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

Lead Project Scientist Event Log

Date 20SEP89

Flight 890920I

LPS WILLOUGHBY

Time	Event	Position	Comments
201720	T/O	MIA	
1803	DROP #1	24°02' 77°22'	GOOD
1834	DROP #2	23°00' 74°51'	GOOD
1855	TURN DROP #3	23°04' 72°56'	GOOD
1908	TA RADAR ONLY UP		BAD
1915	DROP #4	24°41' 72°21'	GOOD
1930	DROP #5	25°55' 72°15'	TRACKING N TO 6 GOOD
1939	6 1	26°30' 72°32'	TRACKING N FROM 6 GOOD
1949	DROP 6	27°02' 72°31'	TURN ONTO DIAGONAL
1959	DROP 7	26°37' 73°08'	W CORNER TRACK E TO 6 GOOD
2005	6 2 DROP 8	26°34' 72°36'	SLP 954 95 KT ON EXIT TO E
2015	DROP 9	26°32' 71°48'	TRACK SE "GOOD"
2045	CLIMB TO 516 mb	25°01' 70°23'	
2047	DROP 10	23°53' 70°16'	GOOD
2102	CLIMB TO 487 mb	24°01' 69°29'	
2114	TURN N/E 68°59'	23°30' 68°59'	
2116	DROP 11	23°34' 68°54'	GOOD
2120	CLIMB TO 447 mb	23°51' 68°41'	
2137	DROP 12	25°03' 67°45'	
2159	DROP 13		STREAMER
2202	DROP 14	26°45' 66°30'	GOOD

OUTSIDE
TURNS

FIGURE
4

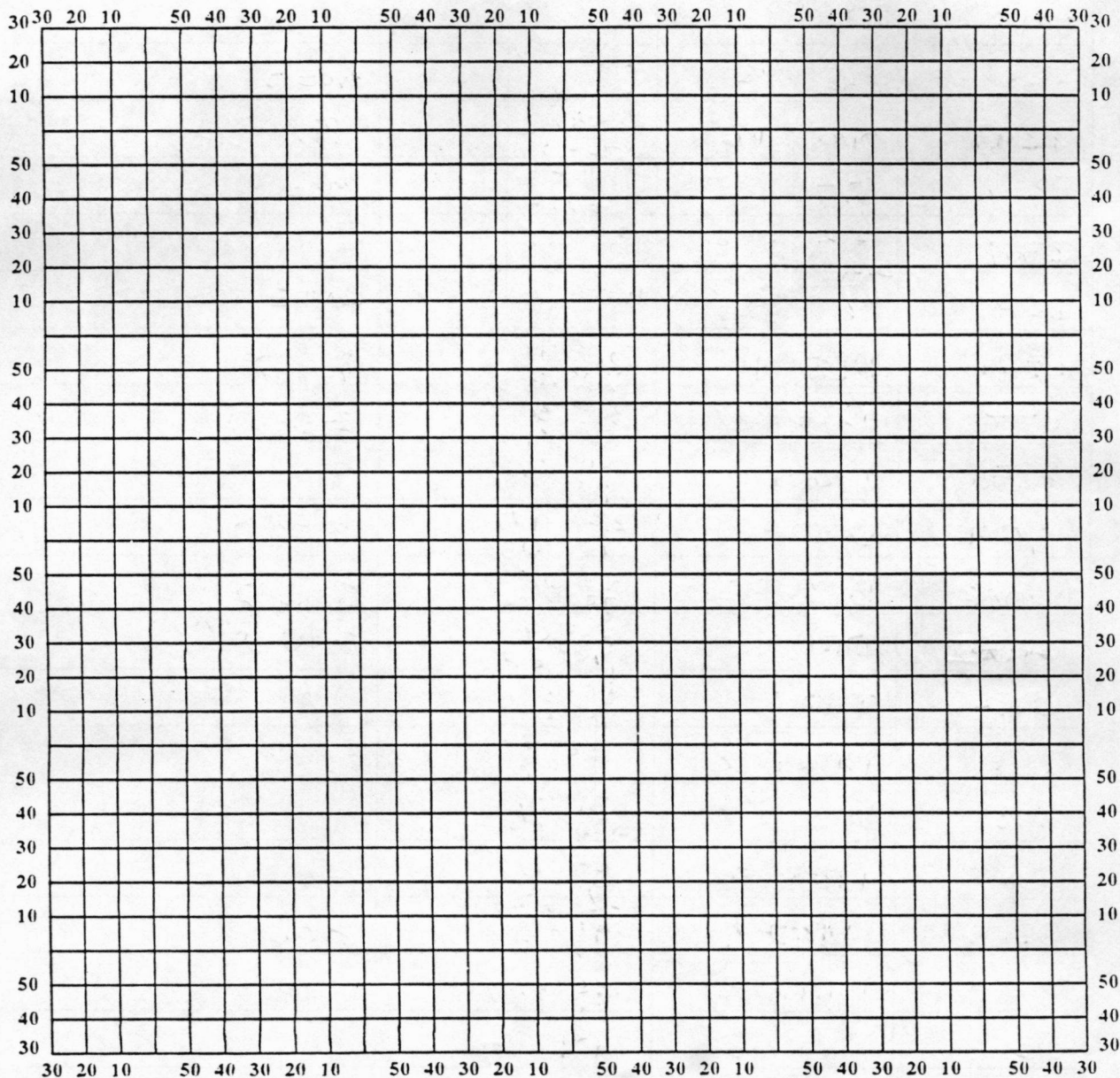
8 CLOUD PHYSICS TAPE IN FIG 4

2045
CLIMB
2111
TURN
2116
DROP

Hurricane Recco Plotting Chart

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

Date _____ Longitude _____ Observer _____



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



27.0 73.3
2 of 2

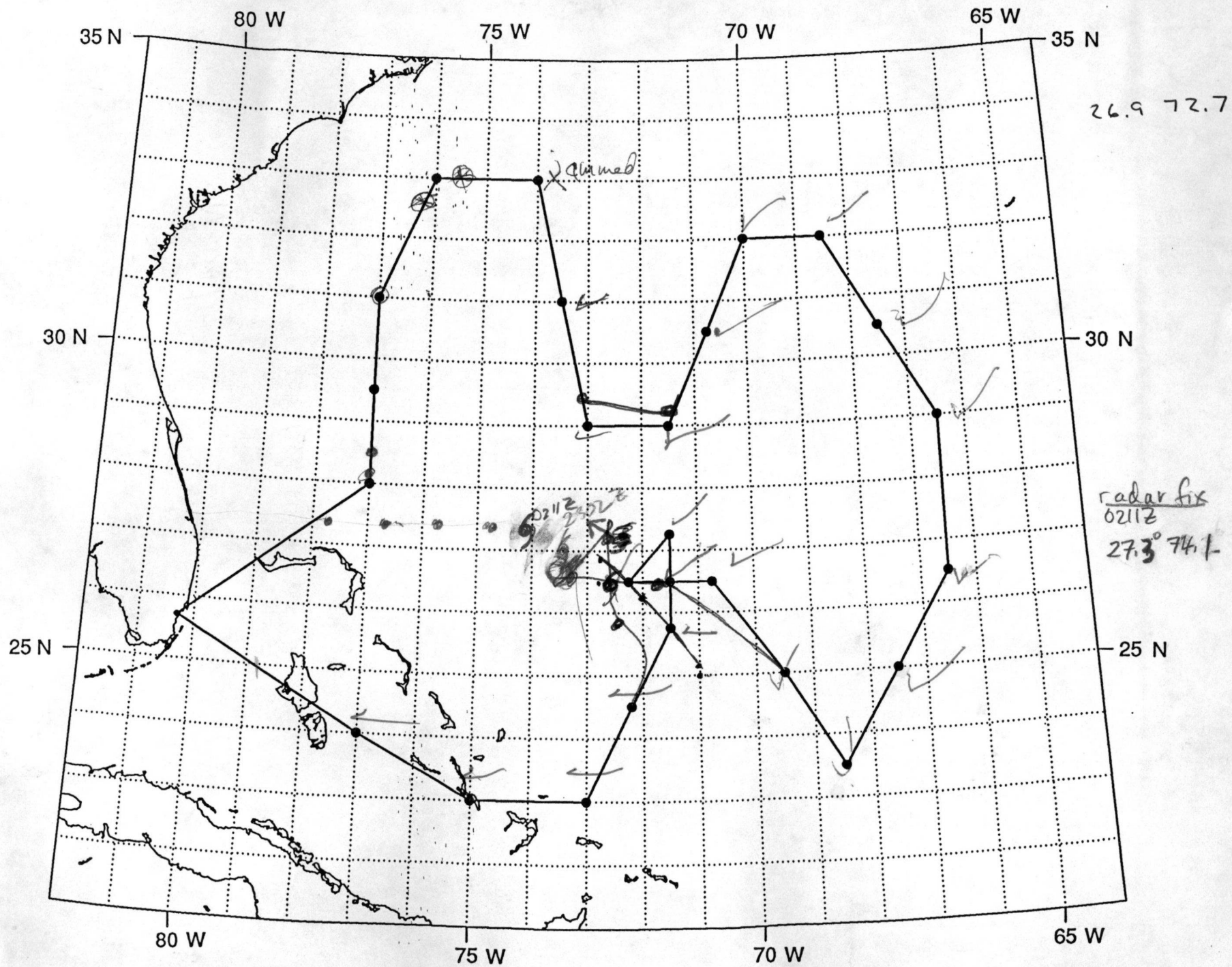
Lead Project Scientist Event Log

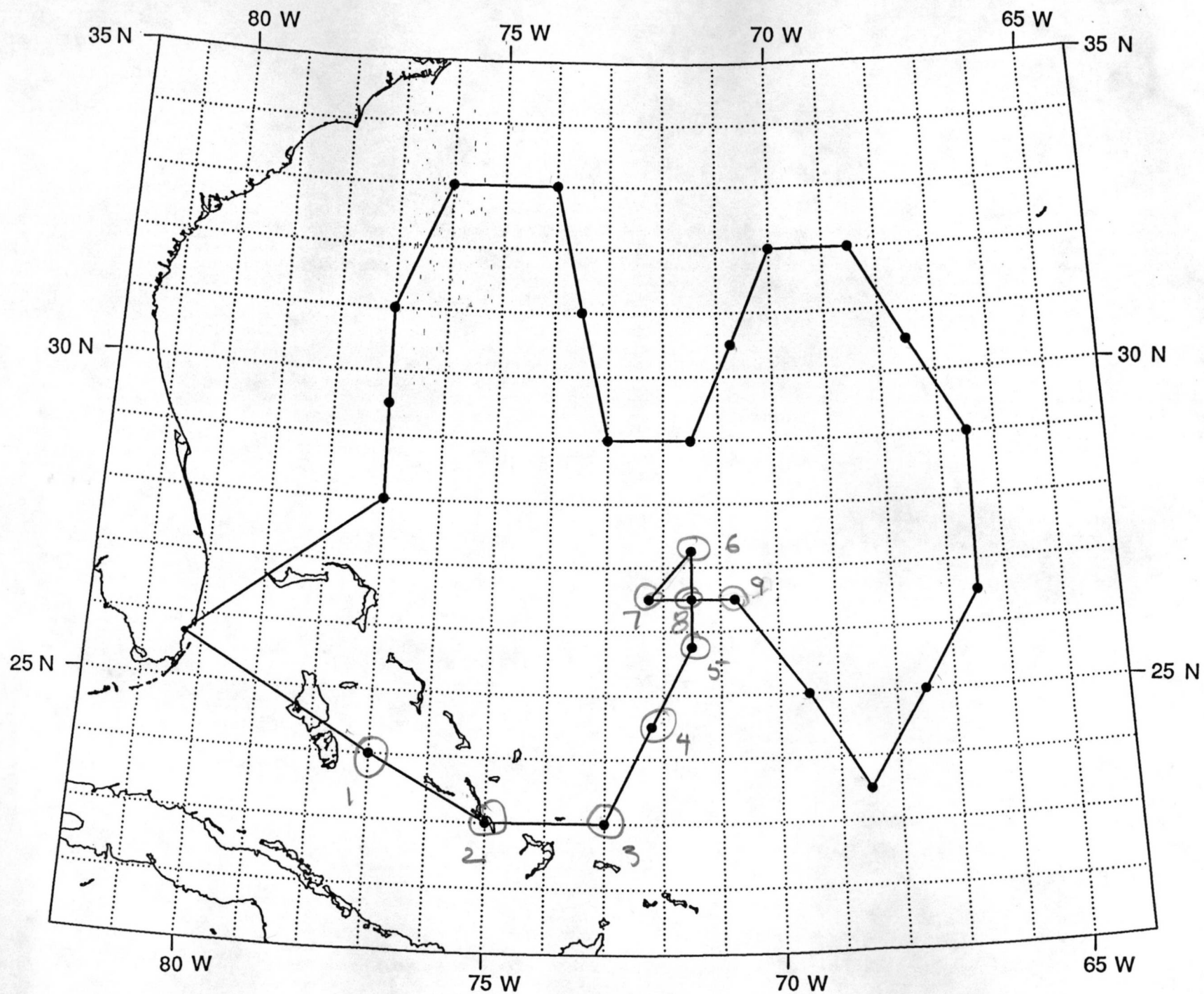
Date 20 SEP 89

Flight 890920I

LPS WILLOUGHBY

Time	Event	Position	Comments
2215	STOPPED RECORDING RADAR		
2227	TURN DROP 15	28°59' 66°30'	GOOD
2247	DROP 16	30° 66°	BAD, STREAMER
2252	DROP 17	30.9 67.6	GOOD
2307	DROP 18	32°01' 68°35'	GOOD
2249	LF RADAR ↑	BOTH ON LINE	LATE ENTRY
2321	DROP 19	31°53' 70°03'	GOOD
2340	DROP 20	30°34' 70°48'	GOOD
2358	DROP 21	29°21' 71°38'	GOOD
21/0012	DROP 22	29°45.6 73°03'	GOOD
0026	DROP 23	31°01' 73°25'	GOOD
0102	DROP 24	33°00' 75°26'	GOOD
0105	TURN	32°59' 75°42'	TRAK SE TOWARD MIA
0111	DROP 25	32°35' 76°06'	GOOD DTH WINDS ONLY 6 GUAL
0132	DROP 26	31°00' 76°59'	GOOD
0149	DROP 27	29°29' 77°00'	GOOD
0206	DROP 28	27°55' 77°00'	GOOD
0211	DROP 29	27°34' 77°19'	STREAMER
0300	LAND	MIA	





ATL. HURRICANE WORK SHEET

NAME HUGO ADVISORY AT1 NUMBER 39 TIME 1600Z MONTH SEP DAY 20 YEAR 1989

☐ DEPRESSION ☐ SUBTROPICAL STORM ☐ SPECIAL
☐ TROPICAL STORM ☒ HURRICANE ☐ CORRECTED

WARNINGS: H. Watch for Abaco and Grand Bahama

GUIDANCE: SATELLITE RECON RADAR DEEP LAYER MEAN..
TIME 20/1200 Z LOCATION N W WIND KT PRESSURE MB
SATELLITE DEG KT SYNOPSIS DEG KT
ACCURACY: WITHIN MI BASIS: ☐ AF NOAA RECON AT Z, ☐ SATELLITE, ☐ RADAR, ☐ SYNOPTIC REPORTS, ☐ EXTRAPOLATION

LATEST SYNOP PSN: 25.1 N 71.0 W AT 1200 Z MOVEMENT TOWARD NW OR 315 DEGS AT 11 KT
PREVIOUS ADVY PSN: N W AT Z MOVEMENT TOWARD OR DEGS AT KT
LOCATION: MILES KM OF

PRESENT POSITION: LAT 25.8 N LON 71.5 W WIND 90 G KT RADIUS NE SE SW NW
20/04 10 16 22Z LOCATION: 360 MILES 580 KM E OF NASSAU MPH 50 KT 100 100 50 100
PRESENT MOTION: 26.1/71.4 KT 14 MPH 23 KM/HR 12' SEA 150 125 100 175
TOWARD THE NW OR 315 DEGS AT 12 KT

FORECAST POSITIONS INHC PRELIM	NHC PRELIM	FINAL	WIND	RADIUS	NE	SE	SW	NW
12-HR VALID <u>21/12 18 00</u> 06Z	<u>26.8 N 72.8 W</u>	<u>26.9 N 72.7 W</u>	<u>G</u> <u>KT</u>	50 KT 34 KT				
24-HR VALID <u>21/00 06 12</u> 18Z	<u>28.3 N 74.6 W</u>	<u>28.3 N 74.6 W</u>	<u>G</u> <u>KT</u>	50 KT 34 KT				
36-HR VALID <u>22/12 18 00</u> 06Z	<u>29.2 N 77.9 W</u>	<u>29.5 N 77.0 W</u>	<u>G</u> <u>KT</u>	50 KT 34 KT				
48-HR VALID <u>22/00 06 12</u> 18Z	<u>31.5 N 79.5 W</u>	<u>31.0 N 80.0 W</u>	<u>V G</u> <u>KT</u>	50 KT				
72-HR VALID <u>23/00 06 12</u> 18Z	<u>37.5 N 78.9 W</u>	<u>34.5 N 80.5 W</u>	<u>50 G</u> <u>KT</u>	50 KT				

STORM SURGE

RAINFALL

TORNADOES

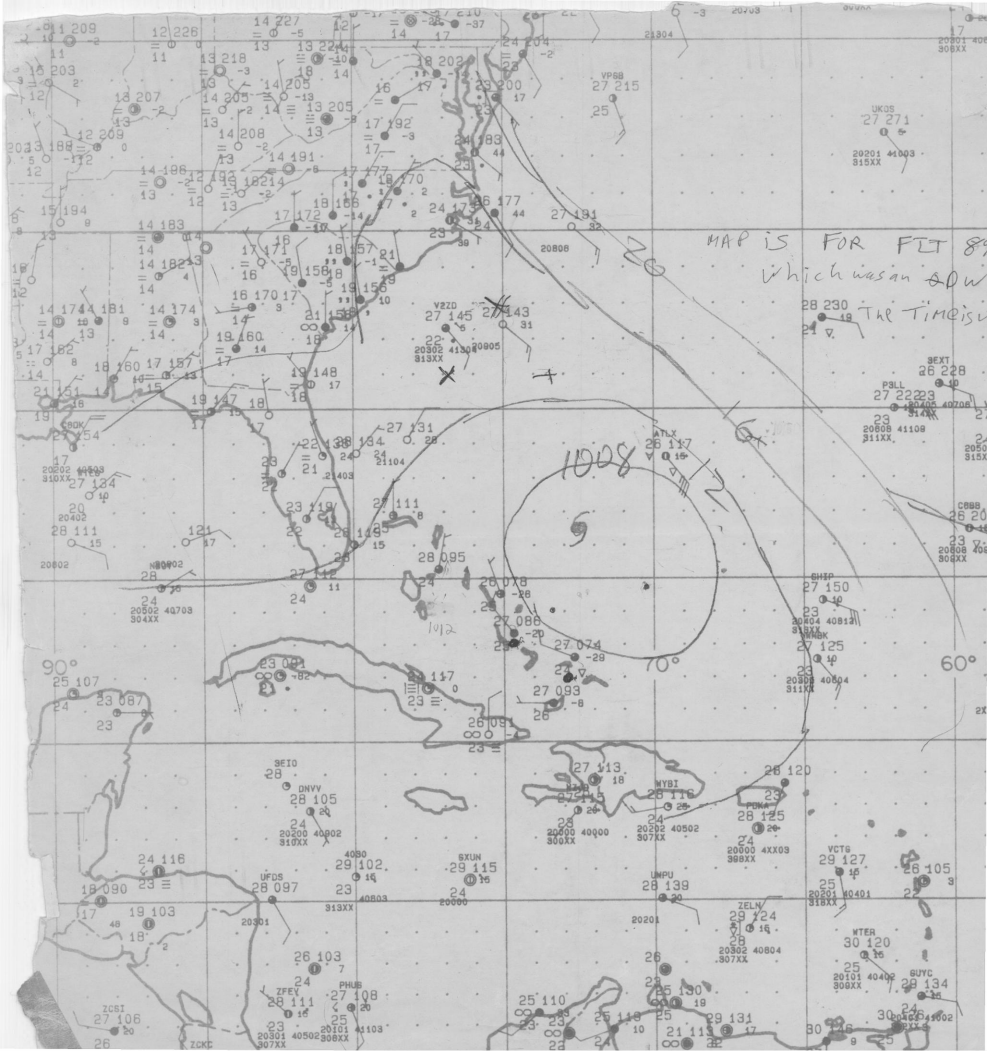
REMARKS

080/314

NEXT ADVISORY AT 20/10 16 22 04Z

FORECASTER

216



1301 20SE89 19A-4 01662 27541 MF2

