

19910818H1. LPS

E.2 Lead Project Scientist (On-Board)

910818H1 §2

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 8/18/91 Aircraft 42RF Flight ID 910818H1 #2

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>Markis</u>	Flight Director	<u>Danirano</u>
Cloud Physics	<u>Dorst</u>	Pilots	<u>Turner/Treckner</u>
Radar	<u>Garnache</u>	Navigator	<u>Strong/Kozo/Wokutis</u>
Doppler	<u>Christoe</u>	Sys. Engr.	<u>Wade</u>
Photographer	<u>—</u>	Data Tech.	<u>Lynch</u>
Omegasonde	<u>Guiney (NHE)</u>	El. Tech.	<u>Roles</u>
AXBT/AXCP	<u>—</u>	Other	<u>Williams/McFadden</u> <u>2 quests</u>
Take-Off	Location <u>MIA</u>	Landing	Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind	<u>AF</u>
<u>18/1200Z</u>	<u>31.5</u>	<u>76.7</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>18/1506Z</u>	<u>32.2</u>	<u>76.6</u>	<u>970mb</u>	<u>—</u>	<u>10kft</u>
<u>18/1639</u>	<u>32.5</u>	<u>76.33</u>	<u>968mb</u>	<u>—</u>	<u>10kft</u>
<u>18/1752Z</u>	<u>32.83</u>	<u>76.5</u>	<u>965mb</u>	<u>85kts</u>	<u>10kft.</u>
<u>18/22Z</u>	<u>33.75</u>	<u>76.17</u>	<u>—</u>	<u>—</u>	<u>—</u>

C. Mission Briefing

fly BL/Doppler mission near Cape Hatteras
for buoy intercomparison for Mark Powell
try it again

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	✓		
Radar	LF/OK, TA?		
Cloud physics	NA		
Data system	✓		
Omegasondes	NA		
AXBT/AXCP	NA		
Doppler	?		
Photography	✓		

REMARKS:

Preflight

TA antenna may have slip ring problem
(related to problems yesterday during ODW mission)

Will go and hope it works. LF seems OK

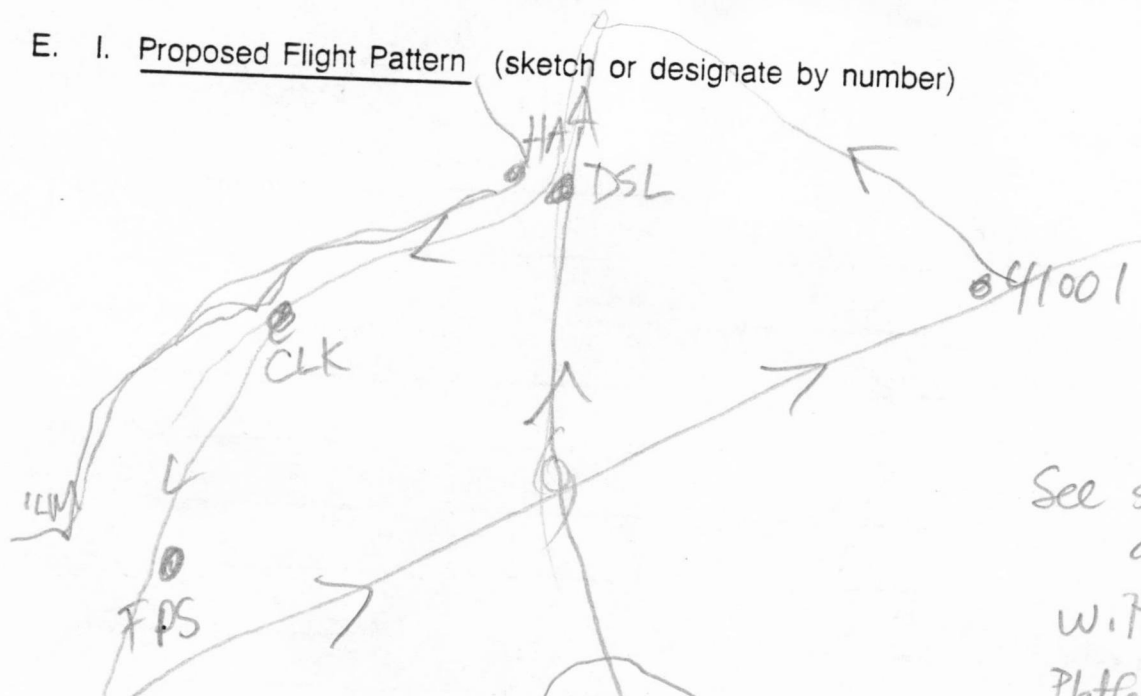
Tim Roles says we'll have to see what happens.

—Spoke to Mark Powell (via Hugh) ^{FL}winds 'more
important than Doppler—should go anyway.

—No PMS probes onboard (oops!)

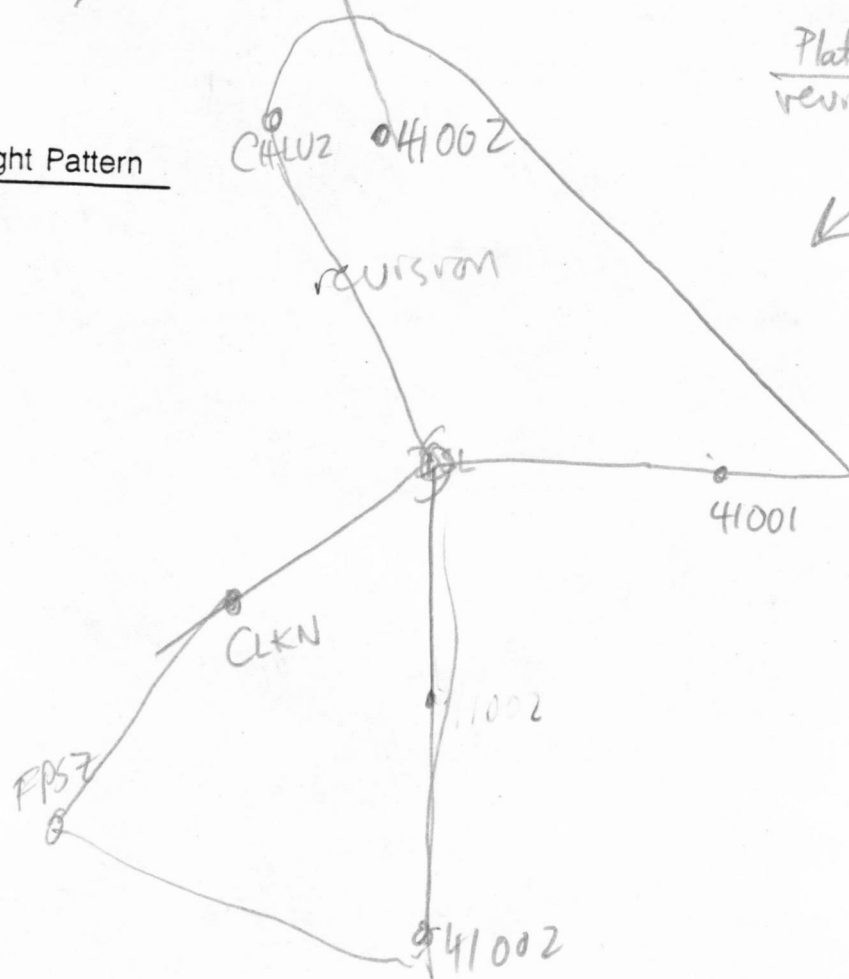
2250^z mission aborted returned to MIA-INE #1 failed —
2330^z replaced INE try it a second time (left Neal behind
second time

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



See sheet
attached
with positions of
Platforms and buoys
revised 2300Z

E. II. Actual Flight Pattern



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

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

Lead Project Scientist Event Log

Date _____ Flight _____ LPS _____

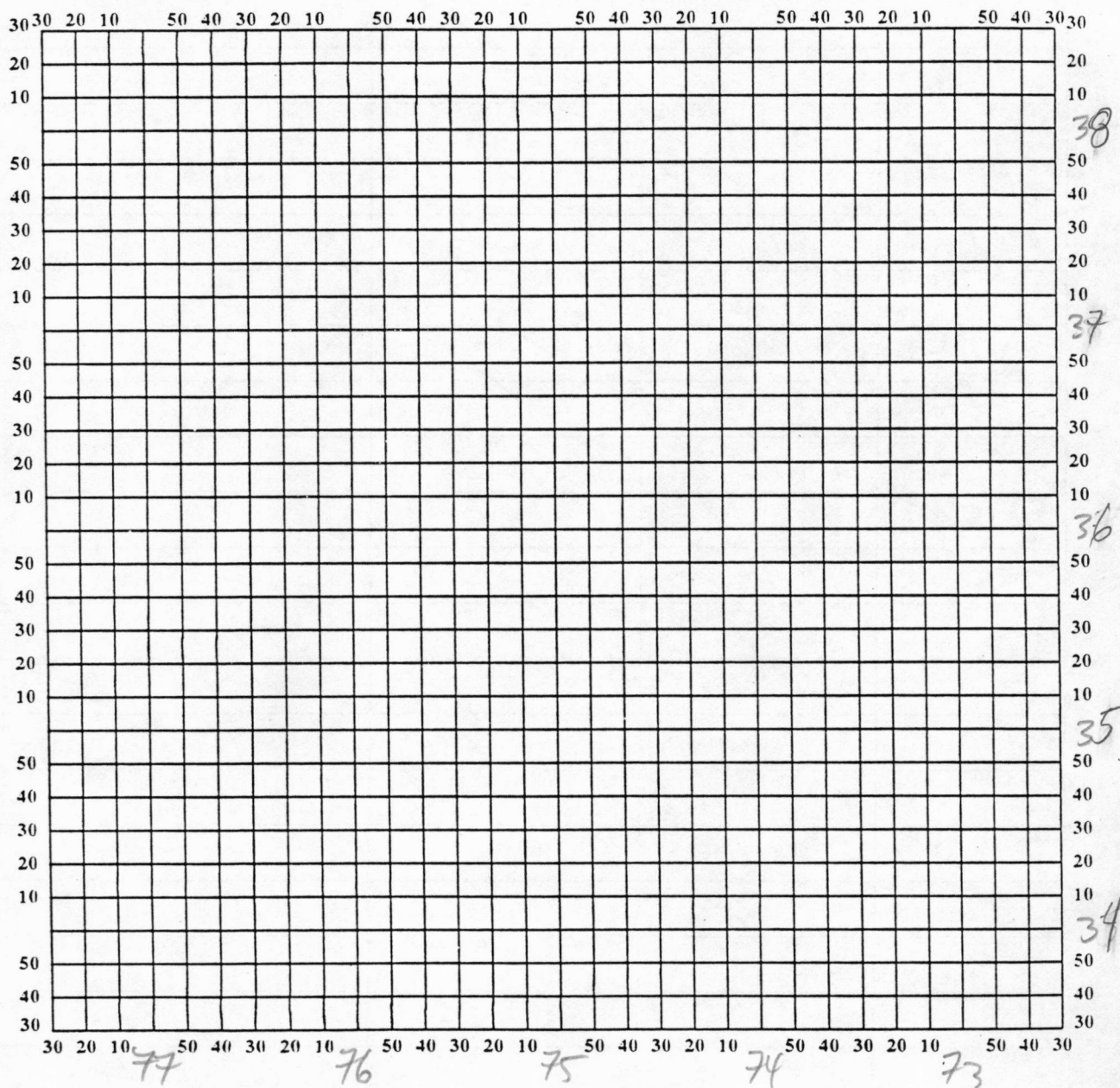
[illegible]

2

Hurricane Recco Plotting Chart

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

Date 8/18/91 Longitude 91081841 Observer Marks



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

Date 8/18/91 Flight 910815H1 LPS Markus

[illegible]

#1

Lead Project Scientist Event Log

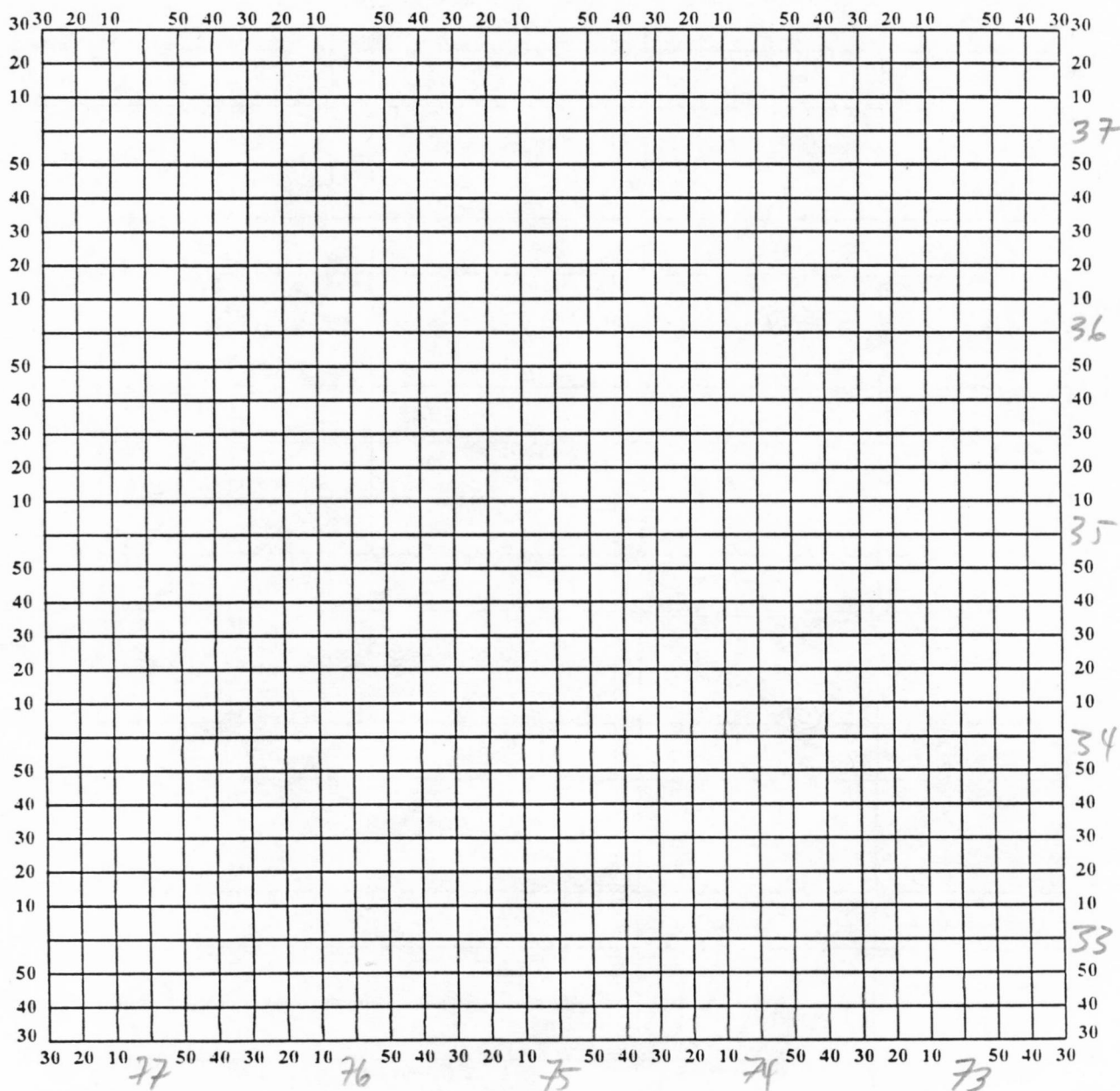
Date 8/18/91 Flight 910818H1 ^{#B} LPS Marlin
Runway 27L

Time	Event	Position	Comments
#1 TO	192145	25°47' 80°17' MIA	mission aborted returned to MIA INE #1 failed
#2 TO again	001114	MIA	
	Scary	19 kft.	
	0148	32°1.6' 76°42.7'	start descent to buoy #1002
020503	32°19' 75°16.1"	41002 overfly at 5000'	
	Turn TK N	to 6	Steve Kosok taking us in
0217		raised TEAL 36	- they are at 10 kft
		TK NW to point N of 6	for N-S run.
		may drop in 6	35°03' 75°14' 11 kts
		reflectivity on both TA and LF	look real (low)
		eye diameter ~ 25 nm	open SW
0257	6	35°24' 75°04"	tucked up in NW corner
	953 mb	TA radar dropping out intermittently	
	TK E	to buoy 41001	
0323	~35°3' 75°58"	1st possible 41001 pos.	
0332	35° 72°	Turn TK 315°	
		TEAL 36	954 mb splash press
	0333	Jim Roles swapped out TA RT but	
		couldn't change com file	because no SN on RT
		Never mind changed Transmitter not receiver.	

moved
360/18

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

Date 8/18/91 Longitude 910818H1 Observer Markus



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

#2

Lead Project Scientist Event Log

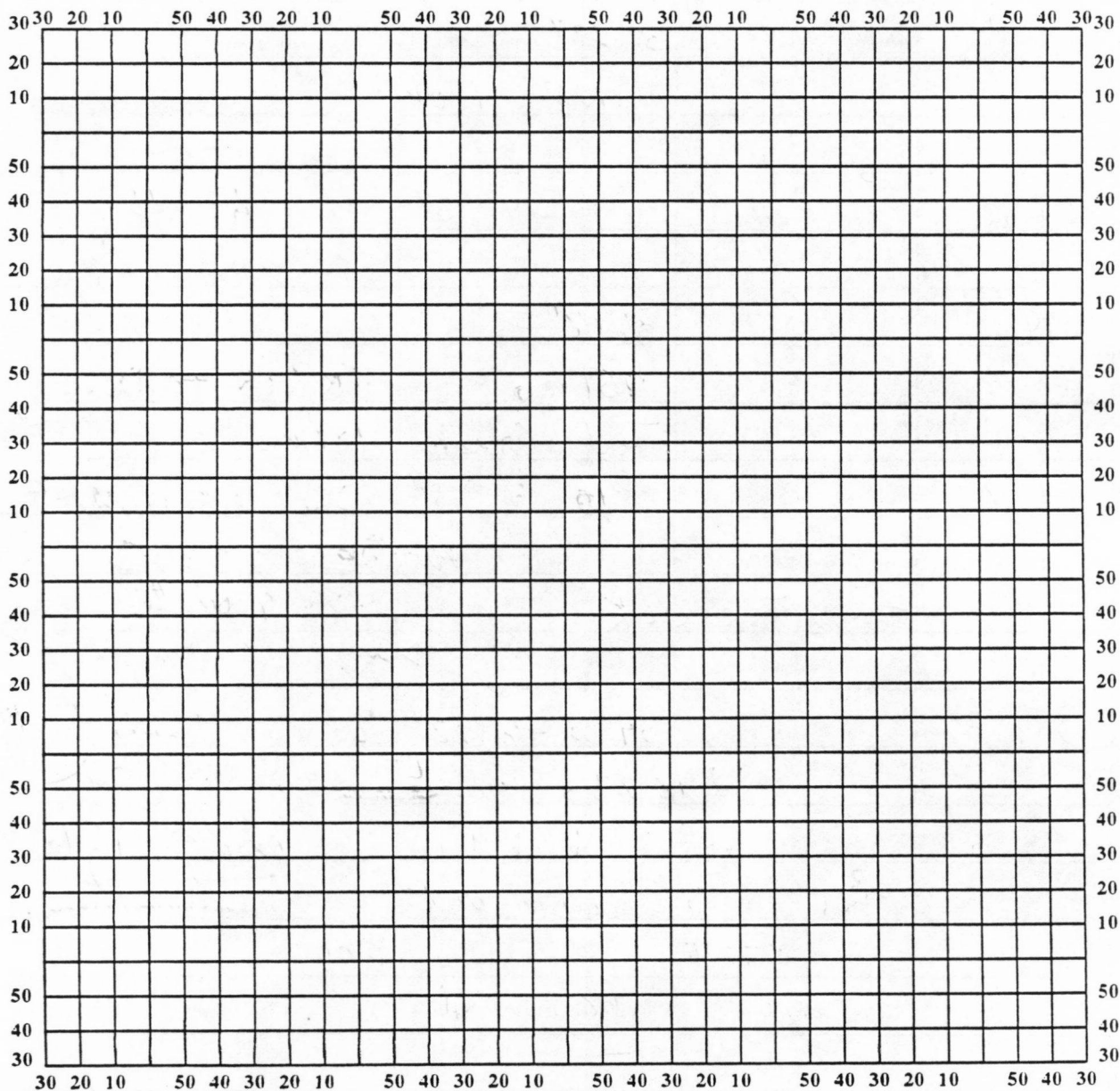
Date 8/18/91 Flight 910818 #1 LPS Marks

Time	Event	Position	Comments
0415	NNW of buoy	37°23' 74°56"	Turn TK S to G
		INE's look	good together and with Loran
0430	with 5 nm of buoy	36°36' 74°53"	buoy 44014
			good wall bumps
0440	G	36°02' 74°41"	1 kt
		951 mb	TK 215 to DSL
		Teal 36 Splash	951 mb
0456		35°10' 75°18"	DSL overflight, #2
	285/54		10-15 min outside 2nd wind max.
	Turn TK to CLK		SW of center
			Ang. mom. from trough??
051630		34°38' 76°32"	CLK overflight, (a little off the coast)
		298/33 (see LFrader)	5000'
052855	climbout head home.		Very Good flight
	go over FPS in climbout		
054035	33°29' 77°32"		FPS overflight
	274/2	6282 m GA	

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.

IAN
DY

