

19840911I2-LPS

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On-board Lead Project Scientist Checklist

DATE 11 SEP 84

AIRCRAFT N432F

FLT 840914I

A. Participants

Function	Participant	Function	Participant
Lead Proj. Sci.	<u>WILLOUGHBY</u>	Gust Probe	<u> </u>
Cloud Physics	<u> </u>	Omegasonde	<u> </u>
AXBT/ AXCP	<u> </u>	Sys Eng	<u> </u>
Hot Film	<u> </u>	Data Tech	<u> </u>
Radar	<u>LORD/GRIFFIN/GOLDENBERG</u>	EI Tech	<u> </u>
Flt Dir/Met	<u>DAVIS</u>	Other	<u> </u>

Take Off 11/1517 Z

Location MIA

Landing

Location

B. Past and Forecast Storm Position

Date	Time	Latitude	Longitude	MSLP
<u>11</u>	<u>1800</u>	<u>33°17'</u>	<u>78°00'</u>	<u>952/128 KT</u>
<u>11</u>	<u>1635 Z</u>	<u>33°00'</u>	<u>78°06'</u>	<u>954</u>
<u>11</u>	<u>1456</u>	<u>32°46'</u>	<u>78°16'</u>	<u>955</u>
<u>11</u>	<u>1344</u>	<u>32°38'</u>	<u>78°24'</u>	<u>957</u>
<u>11</u>	<u>1250</u>	<u>32°33'</u>	<u>78°26'</u>	<u>959</u>

C. Mission Briefing

GET 21,00,03 Z FIXES FLY. VORTEX INTERACTION
PATTERN.

D. Equipment Status

<u>Equipment</u>	<u>Pre Flt</u>	<u>In Flt</u>	<u>Post Flt</u>	<u>Reports Collected</u>
Aircraft	↑	↑		
Radar ① ②	↑	↑		
Cloud Physics	↑	↑		
Data Sys ③	↑	↑		
Omegasondes				
AXBT/AXCP				
Gust Probe				
Hot Film				
Photography				

REMARKS

- ① HAD RADAR XMITTER/RCVIZ PROBS LAST FLITE
REPORTED TO BE OK NOW
- ② DOPPLER ↓, ANTENNA WONT ROTATE
- ③ DATA SYSTEM DUBIOUS.

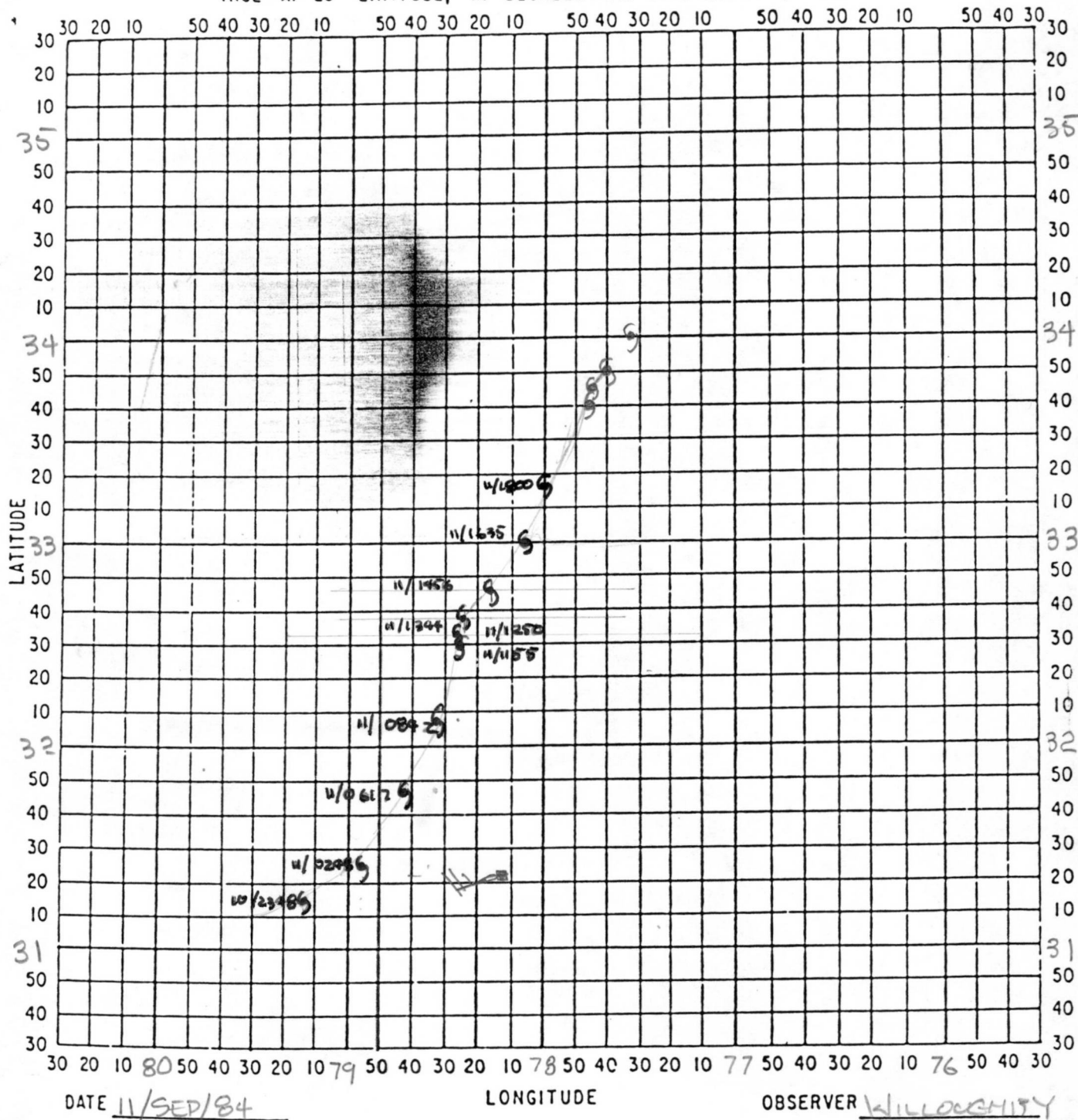
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E. Proposed and Actual Flight Patterns (Identify by number and type - give reason for modification)

240 KT

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

DATE 11 SEP 84

FLIGHT 840911IZ

LPS WILLOUGHBY V=49

Lead Project Scientist Event Log

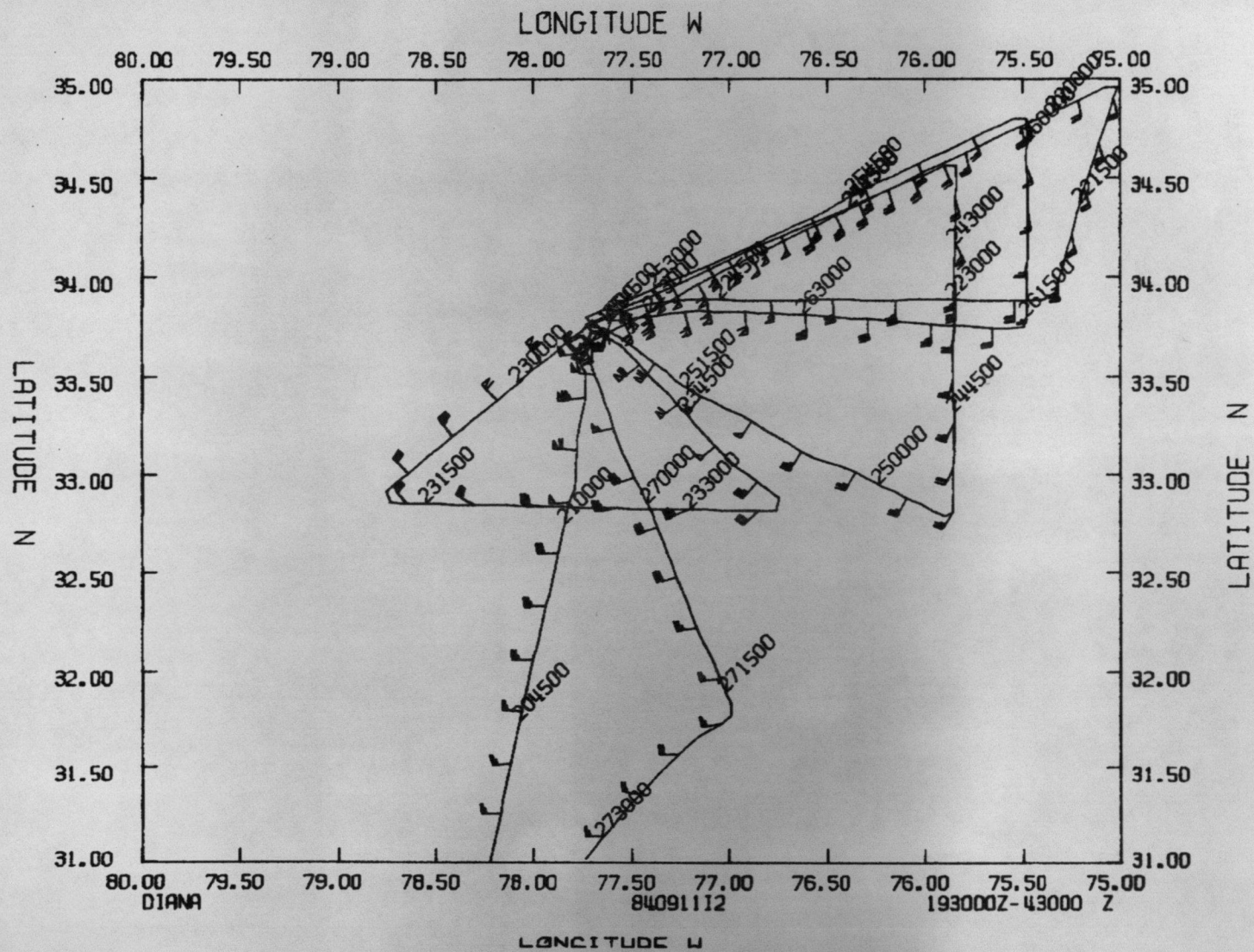
EVENT	TIME*	POSITION	COMMENTS**
TAKEOFF	11/1917Z	MIA	
DESCEND TO 5000'	2034		TRAK N TO 6 INITIAL POINT
6	2115	33°40' 77°45'	TRAK 6 → 060 MIN SLP 950 113 KT
TURN	2203	35.00 75.00	TRAK 195 WIND 166/14 m/s
TURN	2223	35.86 75.0	TRAK 270 → 6
6	2254	33.75 77.74	950 MIN SLP
TURN	2325	32.90 78.75	TRK 090
TURN	2334	33.86 76.71	TRK 312 → 6
6	2353	33.91 77.63	TRK 060 6 → MIN SLP 948
TURN	0022	34.75 75.71	TRK 180
TURN	0054	32.99 75.75	TRAK → 6
6	0122	33.97 59 77.57 37	TRAK 060 6 → 951-MIN SLP
TURN	0157	35.06 75.32	TRAK 180 TO POINT SE OF 6
TURN	0215	34.07 78.31	TRAK 270 → 6
6	0246	34.00 77.52	TRAK 6 → 160 MIN SLP 956 MB 100KT
CLIMB FINAL POINT	0316	32.13 76.75	RTB
LAND	0450	MIA	

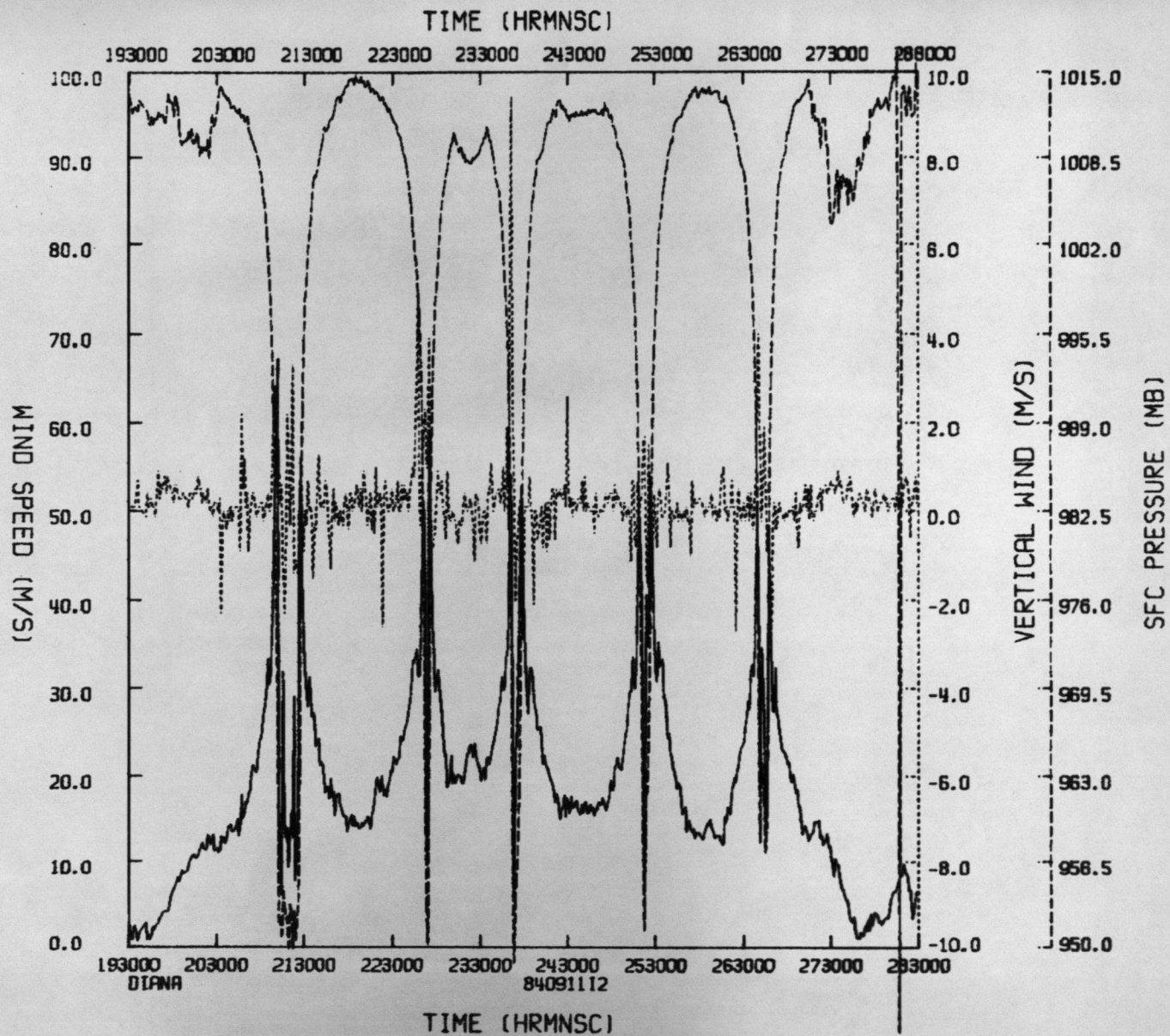
86
652
98
90

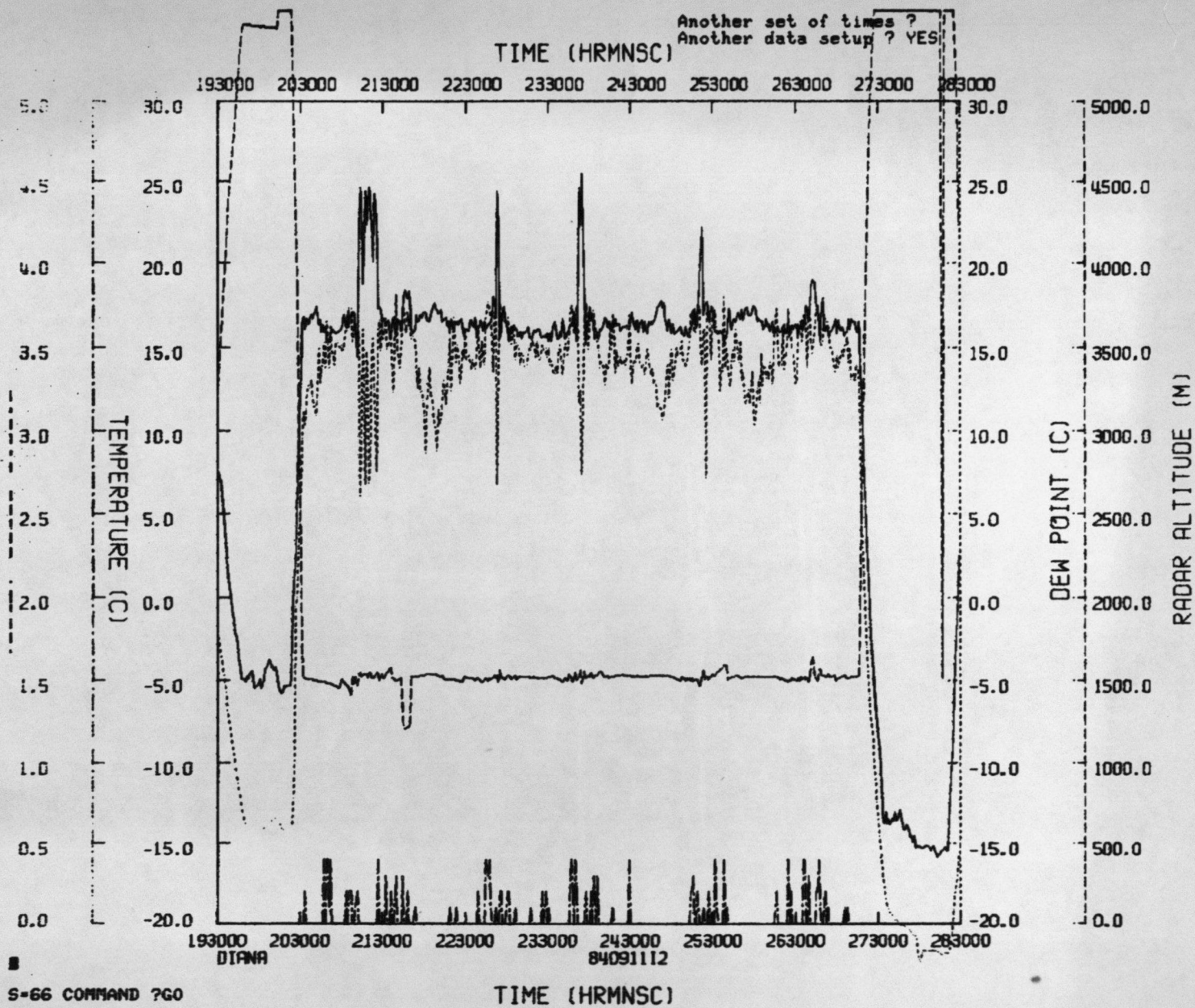
34.03
77.31

13
6
78
52
31
30
10

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







19840911 I2

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RFC-1 WORK FORM (7-76)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION RESEARCH FACILITIES CENTER MIAMI, FLORIDA		AIRCRAFT N43RF	
				FLIGHT NO. 72-84	
				FLIGHT ID 840911 I2	
				DATE SEP. 11, 84	
TAKE OFF (City or airport) MIA		LAND (City or airport) MIA		ALTITUDE 5000'	
PURPOSE NHC - RECON HURRICANE DIANA					
PROPOSED TAKEOFF TIME: 1900Z			PROPOSED FLIGHT DURATION: 9 HRS		
TIME IN: 0455Z			TIME ON: 0449		
TIME OUT: 1910Z			TIME OFF: 1916Z		
BLK. TIME: 9:45 HRS			FLIGHT TIME: 9:33 HRS		
FLIGHT PERSONNEL					
OPERATIONS CREW		SCIENTIFIC CREW		VISITORS	
TURNER		DAVIS	GOLDENBERG	THOMAS	BURTON
MANDELKERN		DUGGINS		FLETCHER	WILLOUGHBY
ADAMS		STONE		BREWER	LOKD
FLEURY		ZYSKO		PHALEN	GRIFFEN
PROPOSED MISSION 21Z, 00Z, 03Z FIXES FOR NHC					
ACTUAL MISSION AND REMARKS AS PLANNED 5 0115Z 33040'N 77045'W SLP 950 WND 255/135 5 2255Z 33048'N 77045'W SLP 950 WND 330/115 5 2355Z 33050'N 77040'W SLP 949 WND 230/115 5 0124Z 33059'N 77037'W SLP 952 WND 210/105 5 0247Z 34000'N 77031'W SLP 958 WND 160/100 19 RECCOS XMTD 5 PENETRATIONS					
DATA COLLECTED AND REMARKS 1 STD IFT LVL TAPES, 3 RADAR TAPES, 37 PMS TAPES, FLS, RS. CLO FILM RADAR, PMS TAPES + 1/10 ID TO HRD INEQ					

28 55
19 10

1

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION		DATE		PROJ. NAME	
Turner		Adams		N43RF		84-0911		19/6		Kunia 25-48.3 80-17.6		11 Sept 1984		Diana	
TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION		LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS							
1908	25-48.2 80-17.6	4	25-48.1 80-17.6		+1.1 0	25-47.9 80-17.6	+1.3 0	Block out							
1916	25-48.1 80-17.0	4	25-48.0 80-17.0		+1.1 0	25-47.8 80-17.0	+1.3 0	Too far							
1922	25-55.5 80-01.2	2 #	25-53.0 79-56.9		+2.5 +4.3	25-52.8 79-56.9	+2.7 +4.3	PBI .172/48 FAIR Pos. CK							
1937	26-42 79-27.8	2	26-43.0 79-25.7		-1.0 +2.1	26-42.5 79-25.6	-1.5 +2.1	PBI ZBV 350/61 Good Pos. CK							
2002		2	28-33.9 78-50.1			28-33.1 78-50.1		ZBV 001/173							
2114		9	33-42.3 77-47.5			33-39.0 77-47.1		33-40 77-45							
2116	33-44.7 77-46.0	2	33-45.3 77-47.6		-1.6 -1.6	33-41.9 77-47.2	+2.8 -1.2	ILM 171/37.5 33-40/17.5 Good							
2232	34-04 76-04	2	34-00.1 76-03.6		+3.9 +4.4	33-53.2 76-04.9	+11.8 -1.7	ILM 100/92							
2238	34-03 76-28	2	34-00.4 76-27.7		+2.6 +1.3	33-53.3 76-28.9		ILM 105/22.5							
2245		2	34-00.7 76-59.7			33-53.3 77-01.0		118/49							
2252	33-52.5 77-33.0	2	33-57.0 77-32.4		-4.5 -2.4	33-49.3 77-33.8	+3.2 -1.8	ILM 150/32							
2304	33-20 78-07.7	2	33-27.0 78-27.0			33-18.6 78-16.4		ILM 197/63 191							
SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERRORS						
				ELAPSE ALIGN POST TIME					LAT	LONG	GS				
INS 1	1754	✓	✓	—	2	1830	0455	10.4	-18.5	+17.5	8				
INS 2 or IMU	1754	✓	✓	—	~	1830	0455	10.4	+7.1	-3.6	8				
ALIGN REMARKS: Note: Lost NAV COMPUTER AS WE BEGAN TO TAXI. WILL															
OTHER REMARKS: run INS'S free.															
TYPE OF FIX: (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER (8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL															

33-42
77-45

1927
+47
2014

CIFS 32-53.7
80-02.3

[illegible]