

19991119II-FDIR

HURRICANE LENNY RECCO

Flight 1 I991119

DATA TYPE	SENSOR or OPTION
INE	2
Accelerometer	2
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

There were several data/time gaps due to data system problems:

131901Z - 135000Z
160121Z - 160130Z
192831Z - 194210Z
200421Z - 200440Z
214811Z - 215140Z
215601Z - 215620Z
215741Z - 215800Z

Several small spurious spikes in the fuselage static pressure (PSF) data occurred during the following time frames:

1358Z - 1401Z
1509Z - 1512Z
1655Z - 1658Z
1658Z - 1702Z
1823Z - 1825Z

These spikes were removed and patched over.

Dewpoint sensor 2, DW2, had several problems during the flight. From 152432Z to 164830Z and from 192730Z to 222452Z, DW2 had erroneous values. These values were replaced with values from DW1. Also from 1656Z to 1658Z several small spurious spikes were removed and patched over.

At 174630Z, 180400Z, 183800Z and 185100Z the radar altimeter had erroneous values due to overflying small islands.

Both INEs performed quite poorly with respect to groundspeeds in both the x and y directions. Aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1023.3 mb	1020.6 mb
Corrected tower pressure	1023.7 mb	1021.2 mb

Flight Director: A. Barry Damiano, (813) 828-3310 ext. 3073

FLY ID: I991119	FM: KMCF	TO: KMCF
FLT NO: 00-12	BLK IN: 00:08Z	ATA: 0000Z
ETD: 1330Z	BLK OUT: 1321Z	RTD: 1331Z
ETE:	BLK TIME: 10:47	FLT TIME: 10:29
SPONSOR ORG: NHC	PROGRAM: HURR. RECCO	PURPOSE: H-LENNY

OAD PERSONNEL

AC McKim	SYS ENG McMillan McMillan
CP O'MARA	DATA SYS ROLES
NAV RATHBON	RADAR
FE TORREY	BT/ODW SMITH
RADIO	CLD PHYS
FD DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAD

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
CURRY	MELC	AOC
LINES, A.	MEDIA	British Daily Mirror
BOTT, C.	MEDIA	British Daily Mirror

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

Get TBW 12Z SOUNDING DATA SYS DOWN 1339Z ... up 1348Z

00Z

Bar DPT 1515Z

160130 click panna

Click winds @ landing

2257 23 30.16

9 17° 37' 1758Z 994 mb

62 30

9 17° 28' 1900Z 994mb

62° 15'

1928-1940Z 2148Z-21530Z

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 QAOWFZ FILE

FLT ID: *D991119*

TIME OFF: *1331Z*

TIME ON: *0000Z*

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<i>1023.3</i>	<i>30.24 / 1024.2</i>	<i>1020.6</i>	<i>30.16 / 1021.7</i>

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	<i>4</i>	
FAST FLT LVL TAPES		
RADAR TAPES	<i>1</i>	
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
ODW GPS	<i>9</i>	<i>5 gnd ; 2 XMIT</i>

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

PREFLIGHT ' OG			NAVIGATOR		AIRCRAFT COMMANDER			FLIGHT DIRECTOR			SCHEDULED / ACTUAL TAKEOFF Z		DATE OF TAKEOFF		
MISSION LENNY			RATHBUN		MCKIM			DAMIANO			1330 Z ' 1331 Z		19 NOV 99		
MH	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	IAS RPTD	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
					240				2896	85 85	+21 +21	1352			
					280				2740	75 23	+16 +53	1424			
					295				2539	120 53	+37 +56	1525			
									2132	225 93	+46 +28	1657			
					240				1720	126 43	+31	1804			
					320				1510	128 25	+28 +25	1854			
					260				1165	142 58	+27 +58	2027	AVNET 2200		
-6 +2	PAR60 MAMEL	132 178			270				757	150 58	+30 +58	2207	+30 2240		
-6 +2	MAMEL RAD6	318 496			270				722	120 46	+20 +46	2315	1+11 2351		
					270				107	124 36	+12 +36	0005			
-6 +2															

57.8 AT 17K

INS PERFORMANCE		
	INS 1	INS 2
BEGIN ALIGN TIME	1135 Z	→
ALIGN STATUS (0-9)	0	0
END NAV TIME	0005 Z	→
START NAV TIME	1315 Z	→
DELTA 1	10+50	→

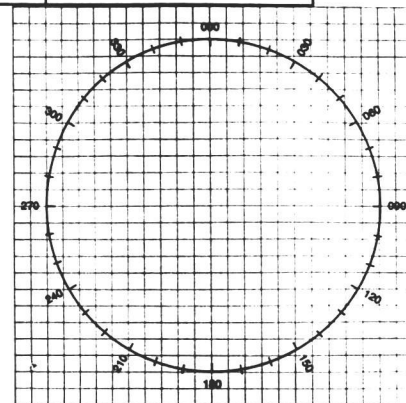
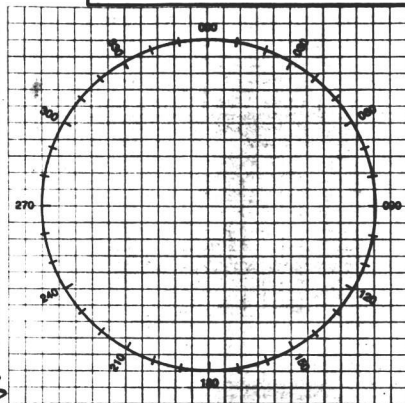
TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	+4.2	+2.2
DELTA LONG	-2.1	-4.6
RCS	11	10
RADIAL ERROR	5	5

REMARKS

526
254

CLEARANCES			
FREQ	ALT	HDG	OTHER
125.0			PBE, ZFP, BRIL MAMEL, TOONS, THANK, 18128225,
139	3.9		THANK, TOONS, MAMEL, BRIL, TOONS , JOHN AT RICE
1707			
530		18N	6250
2237			
1737			FLYING GR 431 TOONS AT BRIL
			ANNY BRIL MAMEL BRIL

MISSION LOG PAGE ___ OF ___



POSITION REPORT
1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

TRANSMIT THE FOLLOWING
FREQUENCY IN USE.
ANY OF THE FOLLOWING

UHF/VOICE VHF/
243.0 121.5

MAYDAY, MAYDAY
THIS IS NOAA

- POSITION _____

- HEADING _____

- AT _____ KTS

- FLIGHT LEVEL _____

- WE ARE A P-3 AIRCRAFT

- NATURE OF EMERGENCY _____

- ASSISTANCE DESIRED _____

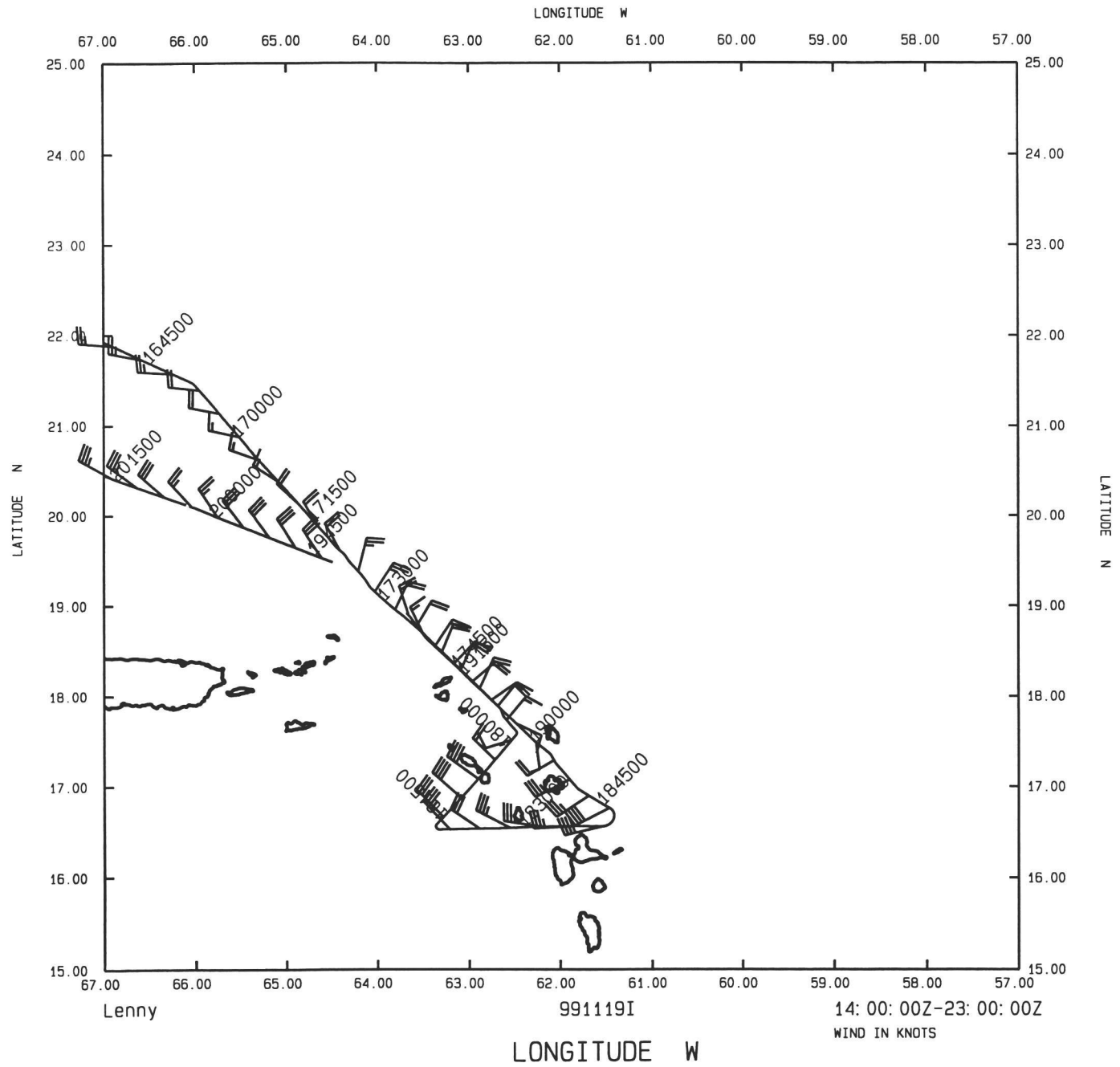
- PILOT INTENTION _____

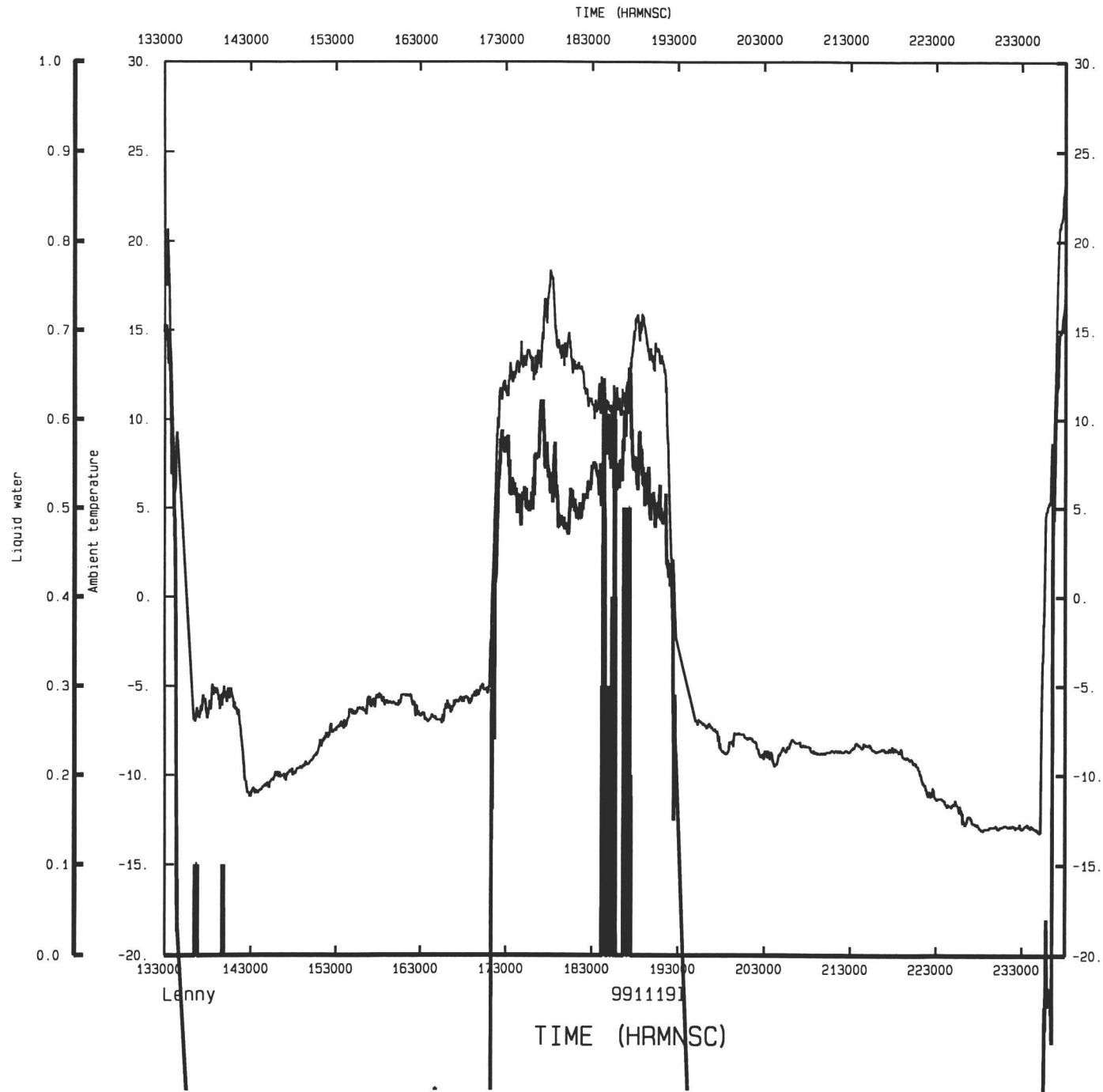
- WE HAVE _____

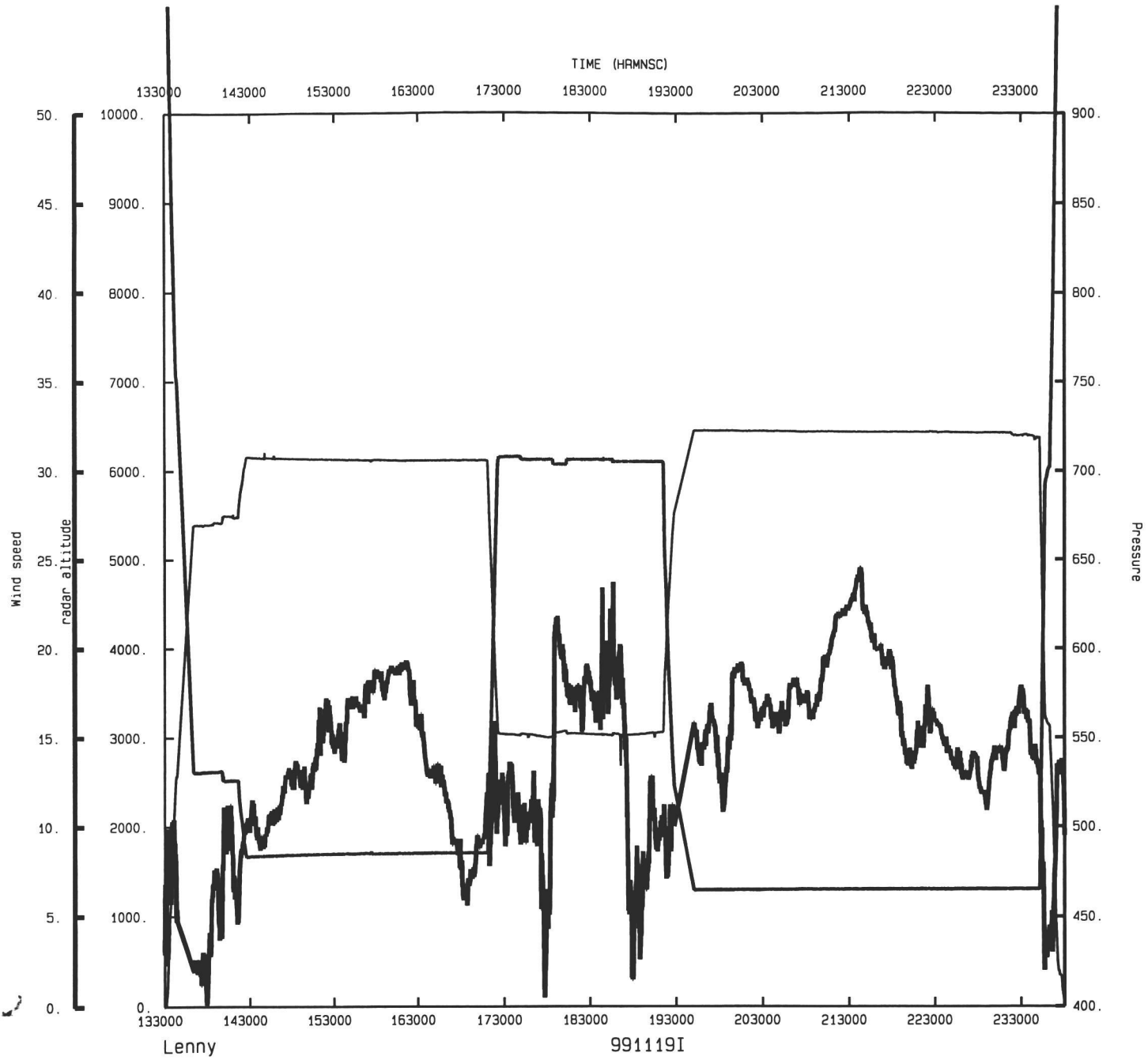
TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	T
1315																			
1321																			
1331																			
1410	FPOI	2554.7 7940.1	2654.7 7940.0	0 +1.1	2654.7 7940.0	0 +1.1													
1458		2515.5 7546.7	2515.1 7546.3	+1.4 +1.4	2514.8 7547.5	+1.7 -1.8			110	1L	109	304	280	33	FL190	269			
1503		2427.6 7334.2	2427.4 7333.6	+1.2 +1.6	2427.4 7333.6	+1.2 +1.6													
1607		2301.2 6947.1	2259.9 6947.0	+1.4 +1.1	2259.2 6949.2	+1.0 -2.1			112	1L	111	316	291	42	FL190	271			
1621		2127.7 6601.5	2126.5 6601.3	+1.2 +1.2	2126.5 6601.3	+1.2 +1.2													
1755:04		1737.3 6229.9	1736.3 6229.9	+1.0 0	1735.5 6233.2	+1.8 -3.3													
1854:14		1728.4 6214.8	1725.1 6216.0	+3.3 -1.2	1724.4 6219.4	+4.0 -5.6													
1938		1919.3 6411.0	1918.1 6411.3	+1.2 -0.3	1917.4 6414.7	+1.9 -3.7			296	SL	291	254	341	30	FL200	273			
2023		2042.3 6730.9	2036.8 6732.7	+5.5 -1.8	2036.8 6736.0	+5.5 -5.1													
2158		2350.9 7343.2	2345.2 7344.8	+5.7 -1.6	2345.6 7347.9	+5.3 -4.7			296	0	296	257	294	31	FL200	286			
2235		2550.8 7751.7	2545.4 7754.7	+5.4 -3.0	2546.0 7757.7	+4.8 -6.0													
2329		2654.2 8030.2	2648.1 8032.3	+6.1 -2.1	2649.5 8034.8	+4.7 -4.6			291	SL	296	278	226	27	FL200	286			
0000		2751.5 8230.5	2747.3 8232.6	+4.2 -2.1	2749.0 8235.0	+2.5 -4.5													

I 991119

TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS		P0
135000	2729	8115	116	118	189	5	-6.9	-37.5	5135	5369	1012.7	530.3	ABV CLD	68.5
142800	2618	7813	116	117	306	21	-11.0	-42.1	5824	6141	1017.8	483.3	CLR	65.0
150200	2508	7524	113	114	290	26	-9.7	-42.4	5808	6121	1013.8	484.4	ABV CLD	69.5
154000	2355	7207	113	112	310	33	-6.3	-41.2	5800	6108	1005.2	484.9	CLR	65.4
160700	2301	6946	110	112	288	35	-5.9	-40.0	5801	6109	1004.0	484.9	ABV-CLD	69.5
163700	2158	6709	110	113	271	25	-6.8	-32.1	5795	6103	1006.2	485.3	ABV CLD	69.6
170900	2019	6502	140	142	306	16	-5.6	-39.8	5793	6102	1008.1	485.3	BTN CLD	68.1
173410	1900	6351	134	130	23	20	11.2	9.2	2922	3027	1003.7	708.0	DROP	74.2
173257	1853	6345	130	126	24	24	13.0	5.6	2924	3028	1002.2	707.9	⊙ DROP	76.6
175804	1737	6230									NO W		⊙ DROP	
180731	1706	6258											⊙ DROP	
182741	1706	6254	220	230	306	41	13.4	4.6	2971	3048	997.8	703.7	⊙ DROP	74.4
183850	1634	6138	91	98	243	32	10.7	10.8	2931	3011	1001.8	706.9	⊙ DROP	71.0
185944	1728	6215									EAST OF SFC CENTR		⊙ EYE DROP	
191208	1819	6310	315	320	37	17	13.4	4.8	2955	3047	1000.3	705.1	NW ⊙ DROP	71.2
191724	1820	6311	315	320	38	18	13.2	5.1	2959	3048	1000.3	705.1	⊙ DROP	76.2
195300	1946	6516	293	297	324	32	-7.3	-38.8	6111	6434	1001.3	464.7	BTN CLD	71.3
202000	2034	6711	294	295	294	34	-7.9	-39.2	6107	6431	1003.1	464.9	ABV CLD	70.7
211500	2228	7048	295	298	312	39	-8.7	-34.1	6107	6424	1004.6	465.0	ABV-CLD	72.8
220300	2402	7403	314	312	282	39	-8.6	-40.5	6104	6419	1004.5	465.1	ABV-CLD	74.7
223200	2503	7601	294	297	318	32	-11.3	-32.1	6104	6457	1010.2	465.1	ABV-CLD	79.2







NOAA/HRD