

FLT ID: <i>N990812</i>	FM: <i>PHNL</i>	TO: <i>PHNL</i>
FLT NO: <i>99-038</i>	BLK IN: <i>0312Z</i>	ATA: <i>0307Z</i>
ETD: <i>1900Z</i>	BLK OUT: <i>1859Z</i>	RTD: <i>1914Z</i>
ETE:	BLK TIME: <i>8:13</i>	FLT TIME: <i>7:53</i>
SPONSOR ORG: <i>NHC/CPHC</i>	PROGRAM: <i>AORR. SURVEILLANCE</i>	PURPOSE: <i>H. EUGENE</i>

DAO PERSONNEL

AC <i>FINKE ✓</i>	SYS ENG <i>GOLDSTEIN ✓</i>
CP <i>MCCANN, YATES ✓</i>	DATA SYS <i>HELL</i>
NAV	RADAR
FE	BT/ODW <i>HORN BROOK ✓</i>
RADIO	CLD PHYS
FD <i>DAMIANO ✓</i>	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
<i>JACKSON, MARK</i>	<i>OBS (REGIONAL SCIENTIST)</i>	<i>PACIFIC REG. HQ</i>
<i>PIKE, RICK ✓</i>	<i>MEDIA</i>	<i>KITV (4) ABC</i>
<i>BLACK, M ✓</i>	<i>HAPS</i>	<i>NRD</i>

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

35 minutes to get to altitude

2225Z Temp decrease

AF FIX
1441' 2326Z
146°39' FL 49KTS
998mb (drop) SFC 55KTS

055Z
29
18

U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO.2 ORWF2 FILE

FLT ID: *N990812*TIME OFF: *1914Z*TIME ON: *0307Z*

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<i>1017.0</i>	<i>30.05</i>	<i>1014.8</i>	<i>30.00</i>

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

1

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

~~ODW~~ GPS*25**24 good; 1 bad; 24 OBS*

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

*1853Z
26
19**0250
28
18*

144600

N990812

(146)

TIME	LAT	LOX	TRK	HD	WD	WS	TA	TD	PA	GA	PS			PG
193524	2236	15618	43	42	230	13	-31.8	-44.2	9020	9468	306		Good	DROP 141.3
194737	2342	15500	50	48	236	19	-60.9	-64.5	12380	12920	180.5		Good	DROP 84.7
195300	2409	15423	52	50	235	20	-62.7	-69.2	12545	13081	176.2		ARRV SET CLD	88.8
200826	2430	15218	92	92	223	19	-61.9	-71.8	12545	13084	176.2		Good	DROP 88.9
202433	2430	15000	90	91	230	16	-62.6	-69.9	12583	13089	175.6		Good	DROP 88.8
204000	2430	14748	90	91	235	16	-62.1	-68.8	12561	13093	175.7	(35)	Good	DROP 88.5
205640	2421	14530	180	180	240	18	-62.3	-68.5	12560	13090	175.8	(34)	Good	Drops 88.4
211639	2202	14537	244	245	233	15	-61.2	-67.7	12531	13123	176.5	(30)	Good	Drops 88.8
213411	2200	14748	269	266	240	16	-61.1	-71.8	12535	13127	176.5	(33)	Good	Drops 89.4
215206	2200	15000	270	266	238	18	-61.3	-70.2	12532	13110	176.6	(32)	Good	Drops 88.7
221043	2155	15275	207	205	220	20	-61.5	-70.2	12529	13115	176.6	(31)	Good	Drops 89.2
223648	1900	15210	115	115	173	13	-64.6	-72.5	13110	13706	160.4	(28)	Good	Drops 81.1
225413	1900	15000	90	91	147	13	-66.0	-73.0	13104	13700	160.5	(27)	Good	Drops 79.3
231156	1900	14748	90	92	152	14	-65.3	-71.7	13101	13707	160.6	(26)	Good	Drops 79.7
232600	1900	14602	90	92	158	14	-65.6	-71.6	13095	13717	160.7	(25)	ARRV CLD	79.9
233029	1853	14531	155	153	155	15	-65.5	-71.3	13097	13720	160.7	(24)	Good	DROP 80.2
234652	1700	14530	180	179	178	9	-66.0	-70.2	13098	13720	160.7	(23)	Good	DROP 81.0
235300	1617	14530	180	179	189	9	-65.7	-68.9	13099	13719	160.6	(22)	INCLD	78.3
000347	1500	14530	180	177	134	7	-65.2	-68.4	13103	13720	160.6	(21)	Good	DROP 80.4
001500	1339	14530	180	175	110	15	-65.6	-70.3	13102	13711	160.5	(20)	ARRV CLD	80.8
002451	1231	14537	245	243	100	12	-65.8	-69.3	13099	13705	160.6	(19)	Good	DROP 80.4
004143	1230	14748	270	266	133	12	-70.4	-73.5	13667	14285	145.8	(18)	Good	DROP 72.6
005952	1230	15000	270	265	142	17	-70.6	-73.4	13667	14281	145.9	(17)	Good	DROP 73.8
011652	1236	15216	334	336	134	15	-70.9	-72.6	13675	14275	145.6	(16)	Good	DROP 72.9
013548	1500	15218	0	2	133	16	-70.6	-72.6	13677	14280	145.6	(15)	Good	DROP 73.7
015130	1658	15224	297	291	161	19	-69.8	-72.1	13673	14278	145.7	(14)	Good	DROP 74.4
015347	1700	15242	270	263	155	20	-70.0	-72.4	13673	14284	145.7	(13)	Good	DROP 73.0
021152	1701	15500	289	283	175	25	-69.8	-72.2	13671	14268	145.8	(12)	Good	DROP 73.0
022407	1751	15621	305	299	192	20	-69.1	-72.4	13674	14266	145.7	(11)	Good	DROP 73.0

N49RF Hurricane 99 / AVAPS DropSonde Log

N49RF Project: HURR EUGENE

Flight ID: 990812N

Mission: _____

Flight #: 1

System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD ☒
1	991828073	1	1936	0	23	asb		✓
2	992435109	2	1947	0	22	asb		✓
3	992435107	5	2008	0	72	asb	4 SAT ~ 20 SEC, BUT NO WIND CALC UNTIL 5 SAT	✓
4	991435162	6	2024	0	32	asb		✓
5	992435111	7	2040	0	35	asb		✓
6	991845259	8	2056	0	44	asb		✓
7	992435163	2	2116	0	30	asb		✓
8	992435159	3	2134	0	20	asb		✓
9	991835089	1	2152	0	19	asb		✓
10	992435108	2	2210	0	53	asb		✓
11	991835094	1	2236	0	28	asb		✓
12	991828074	2	2254	0	21	JWH		✓
13	992435161	5	2312	-0.5	39	CFH		✓
14	991835075	2	2330	0	19	JWH		✓
15	991835108	6	2347	0	24	CFH		✓
16	992435164	4	0003	0	24	JWH		✓
17	991835104	7	0024	0	16	CFH		✓
18	992435104	3	0041	0	12	JWH		✓
19	991835092	5	0058	0	30	CFH		✓
20	991835090	2	0116	0	11	JWH		✓
21	984325202	6	0136	0	28	CFH		✓
22	984325005	1	0152	0	—	JWH	No launch detect PTH abs being received	
23	984325112	5	0153	0	94	CFH	Late Winds	✓
24	984325262	2	0212	0.6	40	JWH		✓
25	984325258	6	0224	0.6	42	CFH		✓
26								
27								
28								
29								
30								
31								
32								
33								

N49RF Hurricane 99 / AVAPS DropSonde Log

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System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒
1	991828073	1	1936	0	23	ash		✓
2	992435109	2	1947	0	22	ash		✓
3	992435107	5	2008	0	72	ash	4 SAT ~ 20 SEC, BUT NO WIND CALC UNTIL 5 SAT	✓
4	991435162	6	2024	0	32	ash		✓
5	992435111	7	2040	0	35	ash		✓
6	991845259	8	2056	0	44	ash		✓
7	992435163	2	2116	0	30	ash		✓
8	992435159	3	2134	0	20	ash		✓
9	991835089	1	2152	0	19	ash		✓
10	992435108	2	2210	0	53	ash		✓
11	991835094	1	2236	0	28	ash		✓
12	991828074	2	2254	0	21	JWH		✓
13	992435161	5	2312	-0.5	39	CFH		✓
14	991835075	2	2330	0	19	JWH		✓
15	991835108	6	2347	0	24	CFH		✓
16	992435164	4	0003	0	24	JWH		✓
17	991835104	7	0024	0	16	CFH		✓
18	992435104	3	0041	0	12	JWH		✓
19	991835092	5	0058	0	30	CFH		✓
20	991835090	2	0116	0	11	JWH		✓
21	984325202	6	0136	0	28	CFH		✓
22	984325005	1	0152	0	—	JWH	No launch detect PTN data being received	
23	984325112	5	0153	0	94	CFH	Late Winds	✓
24	984325262	2	0212	0.6	40	JWH		✓
25	984325258	6	0224	0.6	42	CFH		✓
26								
27								
28								
29								
30								
31								
32								
33								

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurricane 99 Project No. 430 Flight No. 1 Flight ID: 990812N
 SED Crew: Hornbrook, Hill, Goldstein Mission: Eugene
 Pre-Flight: 1813 Z Take-Off: 1913 Z Landing: 0310 Z

SYSTEM		Pre-Flight Check		In-Flight	Post-Flight	
N A V	IRS #1	✓				
	IRS #2	✓				
	IRS #3					
	GPS Honeywell #1	✓				
	GPS Honeywell #2	✓				
	GPS Collins	✓			Off? ☒	
Nose Radar -Collins					Off? ☐	
T E M P		Time	Temp °C		Time	Temp °C
	Temp #1	1815	27.1		0308	29.5
	Temp #2		27.7			29.7
	Temp #3		25.9	①		28.4
	Temp #4		28.8			30.1
	DP Left	↓	18.0	Cal. Time:	✓	18.7
	DP Right		19.2	Cal. Time:		
P R E S S	Attack Angle (ADCAOA)	✓				
	Slip Angle (BPx/DxPx)	✓				
	Differential (PQ1/PQ2)	✓				
	Absolute (PS1/PS2)	✓				
	Check Radome Press. Lines ☒	Date: 7/13/99				
S Y S T E M	DOWN PRT-5 ⇒ Open? ☐	NU			Closed? ☐	NU
	MADS (WINDS/DISCWIN)	✓		②	# DATs: 1	
	MADS Printer ⇒ Paper? ☒	✓			Printer Power off? ☒	
	MADS Cal. Date: 7/16/99	QC time: 1826			QC time: 0315	
	WINDS ⇒ NET BCAST ☒	✓				
	HAPS System / Time set? ☒	✓			# Msg.: 24 # Fail:	
	AVAPS System / Time set? ☒	ASG		③ ④ ⑤		
AVAPS Printer ⇒ Paper? ☒	✓					
	Exterior Walk Around ☒	✓ ASG				
	Inspect DropSonde Chute Bolts	✓ ASG				
M I S C	Satcom (Flight Phone) ☒	✓			Off CB? ☐	
	Call COMSAT? ☒ (*292#)	✓				
	FCU/UPS/CB	CB's Checked? ☒			UPS off? ☐	
	AVAPS Sondes	# On Board: 60	# Dropped: 25		# Good: 34	
	AXBT	# On Board: NU	# Dropped:		# Good: NU	
	APN-232	✓				
	Modem Power On? ☒	✓				

1	DAT Tape #1	On: 1853	Type:	Off: 0317
2	DAT Tape #2	On: 1853	Type:	Off: 0317
Comments:				

Problem Description & Observations

N49RF ୧୫୫୫୫୫୫୫ N49RF

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: EUGENE

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Prepared by the Hurricane Research Division at 05:06:29 PM on 08/11/99.
File: 990812n:ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 12/1900Z

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DROP LOCATIONS

#	LAT ($\ddot{a}$ m)	LON ($\ddot{a}$ m)	RAD/AZM (nm/ $\ddot{a}$ g)	TIME (h:mm)
1	22 30	158 18		0:26
2	23 42	155 00		0:39
3	24 30	152 18		1:02
4	24 30	150 00		1:19
5	24 30	147 48		1:35
6	24 30	145 30		1:52
7	22 00	145 30		2:12
8	22 00	147 48		2:30
9	22 00	150 00		2:47
10	22 00	152 18		3:04
11	19 00	152 18		3:28
12	19 00	150 00		3:46
13	19 00	147 48		4:03
14	19 00	145 30		4:21
15	17 00	145 30		4:37
16	15 00	145 30		4:53
17	12 30	145 30		5:14
18	12 30	147 48		5:32
19	12 30	150 00		5:50
20	12 30	152 18		6:08
21	15 00	152 18		6:28
22	17 00	152 18		6:45
23	17 00	155 00		7:06
24	17 51	156 21		7:18
25	18 42	157 42		7:31

00 - 1
01 - 2
02 - 3
03 - 4
04 - 5
05 - 6

400 m
254 3 m

2009 200 out

2038 093 out

14 15 minutes
13/0017

23252

3000 SCT
4500 SCT
7+
056/16
30/17

3002
AK

14 42
14639

998
Drop

49 KTS
55 KTS

AF FIX

197

45 minutes

14° 38'
145° 58'
994 MB

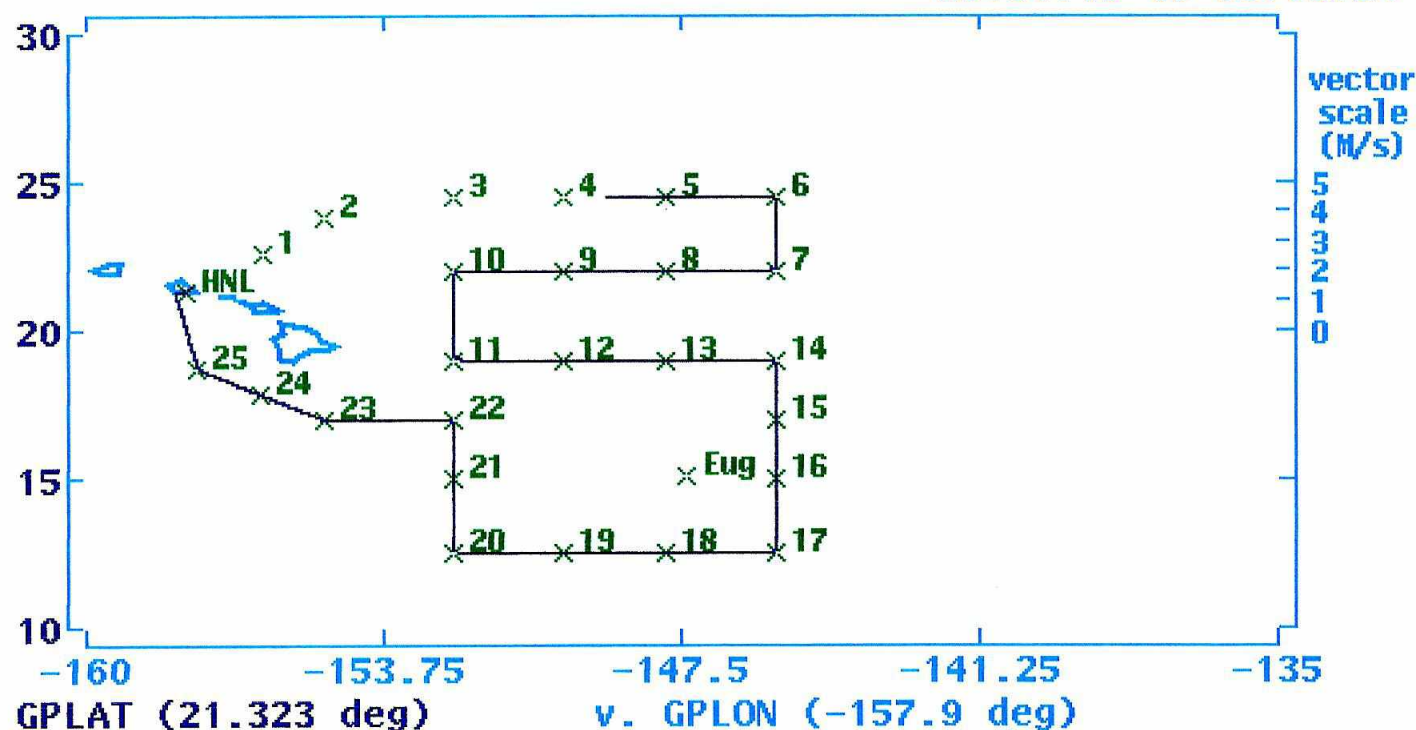
10K

VHF 123.05
968 TRAL 41

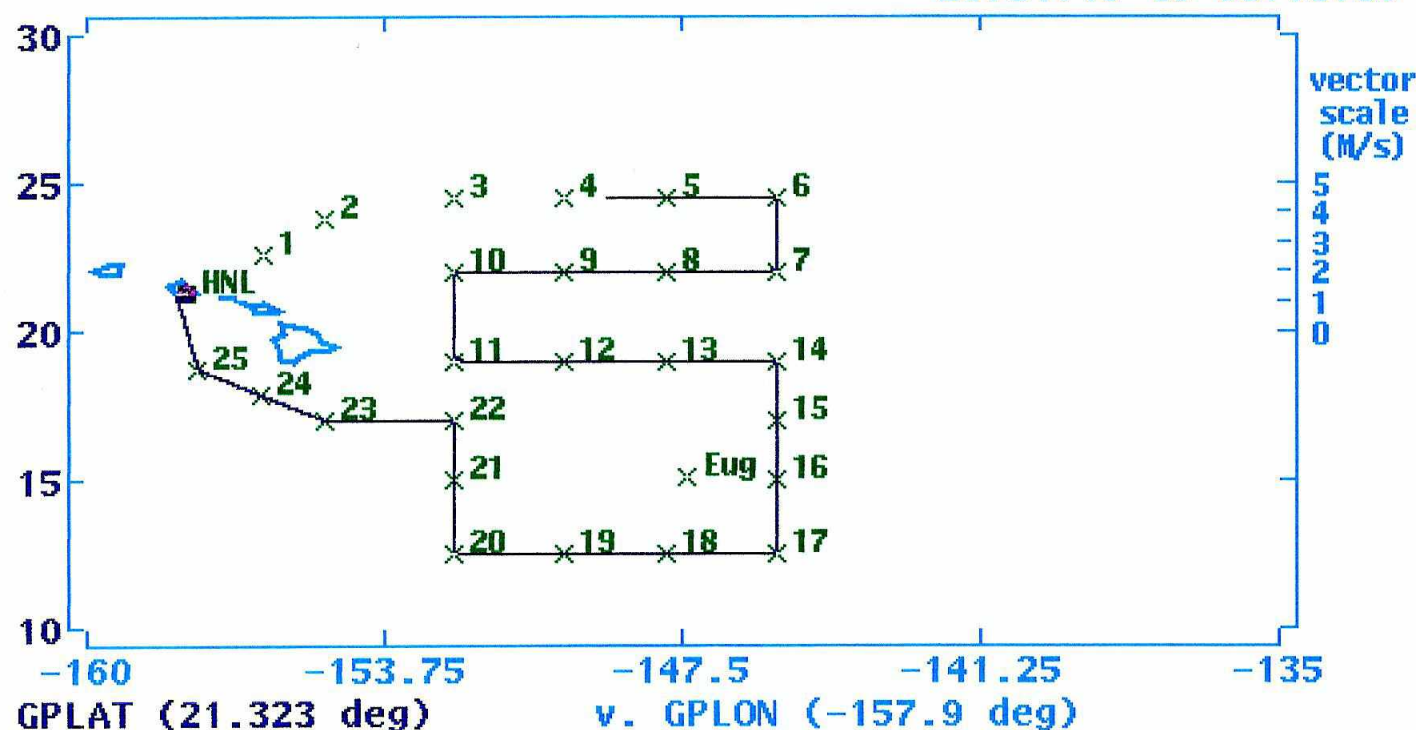
10K IN

IN NE

'JCPB1' (winds@eiger) Proj. 430 Flt Aug-13-99 03:08:24
20:31:19 to 03:08:24



'JCPB1' (winds@eiger) Proj. 430 Flt Aug-13-99 03:08:30
20:31:19 to 03:08:30



G4 Hurricane Surveillance

N990812 Hurricane Eugene (Central Pacific)

<u>DATA TYPE</u>	<u>SENSOR or OPTION</u>
INE	VEW, VNS
Accelerometer	ACINS
Temperature Probe	AT1
Altitude (for vertical wind)	PALT
Static Pressure	PS1M
Dynamic Pressure	QC1M
Dewpoint Probe	DPRC

Notes:

There were no time gaps.

The east/west and north/south groundspeeds from both Honeywell inertial navigation systems performed fair during this flight with both exhibiting large differences with respect to the GPS groundspeeds.

The G4 stopped in Long Beach, CA to refuel before continuing on to Hawaii.

No dynamic corrections were applied to the measured static and dynamic pressures. Thus wind direction and wind speed may not be representative of actual flight level conditions.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1017.0mb	1014.8mb
Corrected tower pressure	1017.6mb	1015.3mb

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