

Flt ID: 020306N	From: PHNL	To: PANC
Flt No.: 02-34	Blk In: 0255Z	ATA: 0252Z
ETD: 2000Z	Blk Out: 1944Z	ATD: 1958Z
ETE:	Blk Time: 7:11 (7.2)	Flt Time: 6:54 (6.9)
Sponsor Org: NOEP	Program: WINTER STORMS	Purpose: HAWAII TO ALASKA FLT #14

AOC Personnel

AC: YATES	Sys Eng:
CP: McCANN / POSTON	Data Sys: GOLDSTEIN
Nav:	Radar:
FE: KITSON	GPS/BT: CARPENTER / SANS SOUCE
Avionics:	Cld Phys:
FD: DAMIANO	CZYZYK PM

Participating States/USVISIO/AOC

Name (Last, First)	Activity on Aircraft	Affiliation

Proposed/Actual Mission/Remarks (Recco, Fixes, Storm, PENET, NHOP #)

Problems with MADS right after T/O. Came back at 2108Z.
AVAPS locked up when sonde # location #10 was deployed.
Launched backup sonde from L5 AVAPS

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

1406WFEZ

Flt ID: 020306N	Time Off: 1958Z	Time On: 0252Z		
	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1019.4	30.10	1027.7	

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	1	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	19	16 good; 3 bad; 16 messages sent

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

U.S. Department of Commerce/NOAA/Aircraft Operations Center

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _s	Press. Alt.	Geo. Alt.	Stc Press.	Press. Stc	Dyn. Press	Remarks
204639	2518	15936					OUT	BEFORE	SPLASH					DROP (27)
210517	2730	15939					NO	ALT	INFO					DROP (32)
211036	2809	15940	358	352	276	19	-68.1	-77.8	12498	12752	—	175.6	89.6	DROP (25)
212611	3000	15943	359	352	257	23	-67.3	-78.2	12496	12714	—	175.7	90.0	DROP (22)
214646	3230	15947	359	349	260	32	-66.5	-76.0	12485	12654	—	175.8	88.6	DROP (21)
220000	3408	15950	359	351	247	27	-59.9	-73.9	12490	12615	—	175.9	90.4	OVC CIR
220650	3500	15951	359	352	259	22	-58.2	-72.8	12487	12601	—	175.9	88.6	DROP (22)
222640	3730	15955	359	350	253	30	-57.3	-71.3	12485	12522	—	176.0	87.5	DROP (15)
204557	4000	16000	330	320	240	32	-53.9	-70.2	12486	12463	—	176.0	89.5	DROP (23)
230413	4136	16202	316	307	238	30	-50.8	-67.0	12487	12380	—	175.9	88.6	DROP (11)
232227	4312	16412	314	307	218	24	-49.0	-65.4	12487	12289	—	175.9	89.3	DROP (10)
2330	4448	16634					AVRAS	LOCKED	UP	NO	GOOD			DROP
234335	4503	16657	312	308	210	12	-44.7	-63.4	12483	12222	—	175.9	88.4	DROP (38)
235943	4624	16909	310	308	182	5	-45.4	-64.0	12486	12201	—	175.9	88.1	DROP (26)
001902	4802	17153	356	357	95	4	-46.1	-63.9	12490	12191	—	175.8	87.9	DROP (18)
002800	4857	17058	36	38	116	12	-47.4	-64.5	12486	12000	—	175.9	87.7	OVC CB
003556	4945	17003	36	38	125	13	-47.9	-65.1	12491	12220	—	175.8	89.2	DROP (27)
005330	5130	16755	38	40	135	12	-50.7	-66.2	12490	12251	—	175.9	88.6	DROP (38)
011130	5315	16534	41	40	174	5	-51.7	-67.0	12488	12287	—	175.9	87.5	DROP (19)
012449	5430	16343	42	40	356	4	-55.1	-68.5	12489	12314	—	175.9	88.3	DROP (33)
012904	5453	16306							BACKUP					DROP (26)
021600	5909	15503	49	46	340	6	-50.2	-65.1	12485	12273	—	176.0	102.3	CLR

N49RF AVAPS DropSonde Log

N49RF Project: Winter Storms 02 Flight ID 000306N

Mission: HNL-ANC Flight #: 14 System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒
1	003 338 030	1	2046	.2	27	JSS	WEAK TOLEM LOST ALL DATA SPARE	
2	003 338 091	2	2105	.3	32		BAD TEMP NO GED ACT	
3	003 338 168	1	2110	.3	25			✓
4	003 338 166	3	2127	.2	22			✓
5	003 338 095	1	2146	.2	21			✓
6	003 135 319	1	2206	.2	22			✓
7	003 338 171	1	2226	.4	15	↓		✓
8	003 338 093	1	2245	.3	22	ASS		✓
9	003 338 165	1	2304	.6	11			✓
10	003 338 090	1	2322	.5	24			✓
11	003 515 251	1	2340	-.7	-		SYS FAIL-SEE BACK	
12	003 475 003	5	2343	0	38			✓
13	003 338 061	1	2359	0	26			✓
14	003 338 170	1	0019	.4	18			✓
15	003 330 096	2	0035	.4	23	↓		✓
16	003 338 029	1	0053	0	54	DWC		✓
17	003 115 049	1	0111	.4	19			✓
18	003 338 094	2	0124	.4	53		Lost winds	
19	003 338 088	3	0129	.5	26	✓		✓
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								

Drop #	Sonde Serial Number	Chn #	Time (ZULU)	Press. offset	Winds time	Operator Initials	Comments/ Drop Status /Reason for Failure	GOOD ☒
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								

545 FAIL - SONDE DATA DISPLAY FAULT; AFT DATA, POS & TIME OK; REBOOT 07/21/01
 @ LAUNCH

AVAPS HINTS

- N43's **RED PHONE** appears to interfere with AVAPS telemetry, don't allow its use while sondes are in the air
- ASDL transmits on 401.8MHz, and will trash AVAPS telemetry +/- 1 MHz from that point
- Rawinsondes transmit at 403.0. Caribbean taxi drivers and bandit radio stations transmit wherever they want.
- The sonde GPS Oscillator needs at least 2 minutes to warm-up and stabilize. If you drop early, the winds data (if any) will be initially not accurate and probably late.
- Below 10,000', open the P3 launch chute cover holes at least 2/3 of the way. From 10,000' to 18,000', open about 1/2 way, above 18,000' open 1/3 of the way.
- Dropping a backup sonde prior to selecting **BEGIN COLLECTING DATA** is the single most frequent operator error.
- 60 seconds is the cut-off time for Good vs. Late winds. If no satellites are locked on by 60 seconds, or no winds data by 80 seconds, drop the backup.
- Frequency block assignments: **Air Force - Block A** **N42RF - Block B** **N43RF - Block C** **N49RF - Block D**
- P3 Drops only.... Shorten the ribbon to about 20" - 25"
- When sonde telemetry fails prematurely, wait until the normal drop time has elapsed to terminate data collection.
- If Pre-launch sonde telemetry is dependent upon hand position while holding the sonde in order to **NOT** generate CRC errors, the sonde transmitter is bad and it should not be dropped.

42120 = 12837 m

12830

N49RF AOC GPS Dropwindsonde Log

Flight ID 020306N

Flight Director

RAMTANO

Page 1 of

Mission ID WSWSC

Storm TRANSIT

4802 17153

Drop #	Comment Sonde ID	Time (UTC)	Lat (°N)	Lon (°W)	Sfc Prs mb	WX Cond	Comments	OB #	SatComm Failures	Sent Time
1	003338030	210459	2730	15936	1023.7	THN clb/cir	NO WINDS	1	—	2105
2	003338091	210517	2730	15939	1023.1	—	NO WINDS	—	—	—
3	003338168	211036	2709	15940	1024.0	THN clb/cir	210614	2	1	2143
4	003338166	212611	3000	15943	1024.7	THN clb/cir	214913	3	—	2153
5	003338095	214646	3330	15947	1023.3	THN clb/cir	220608	4	—	2213
6	003338319	220650	3500	15951	1021.5	OVE cfr	223013	5	—	2233
7	003338171	222640	3930	15955	1020.7	THN clb/cir	224530	6	—	2251
8	003338093	224557	4000	16000	1018.4	THN clb/cir	230708	7	—	2312
9	003338163	230413	4136	16002	1016.5	THN clb/cir	232323	8	—	2328
10	003338090	232227	4312	16412	1012.4	BNW SC	234633	9	—	2351
11	003338091	2330	448	16054	—	—	—	—	—	—
12	003338003	234335	4803	16657	1005.8	—	NO WINDS ALW 953mb	10	111	0015
13	003338061	235943	4824	16909	999.1	—	—	11	—	0026
14	003338170	001902	4802	17153	995.0	OVE THN CIR	003911	12	—	0043
15	003338096	003556	4445	17003	995.2	—	005055 mb	13	—	0101
16	003338029	065330	5130	16755	993.2	OVE CIR	011422	14	—	0119
17	003338049	011130	5815	16534	995.8	OVE CIR	013507	15	—	0140
18	003338094	012449	5430	16343	1015.1	OVE CIR	NO WINDS (4776)	16	—	—
19	003338098	012904	5453	16306	—	OVE THN CIR	29015558	16	—	0200

5430
5434
16343

2500 158 40

March 6, 2002

NOAA49 Winter Storms Reconnaissance PHNL-PANC Track

PHNL 21 19.0N 157 55.6W

Drop 1	25 00N	159 36W	Turn 1, First Drop	1023
Drop 2	27 30N	159 39W		1023
Drop 3	30 00N	159 43W		1024
Drop 4	32 30N	159 47W		1023
Drop 5	35 00N	159 51W		1022
Drop 6	37 30N	159 55W		1020
Drop 7	40 00N	160 00W	Turn 2	1018
Drop 8	41 36N	162 02W		1014
Drop 9	43 12N	164 12W		1009
Drop 10	44 48N	166 34W		1003
Drop 11	46 24N	169 09W		1000
Drop 12	48 00N	172 00W	Turn 3	998
Drop 13	49 45N	170 03W		992
Drop 14	51 30N	167 55W		999
Drop 15	53 15N	165 34W		1006
Drop 16	55 00N	162 56W	Turn 4, Last Drop	1017

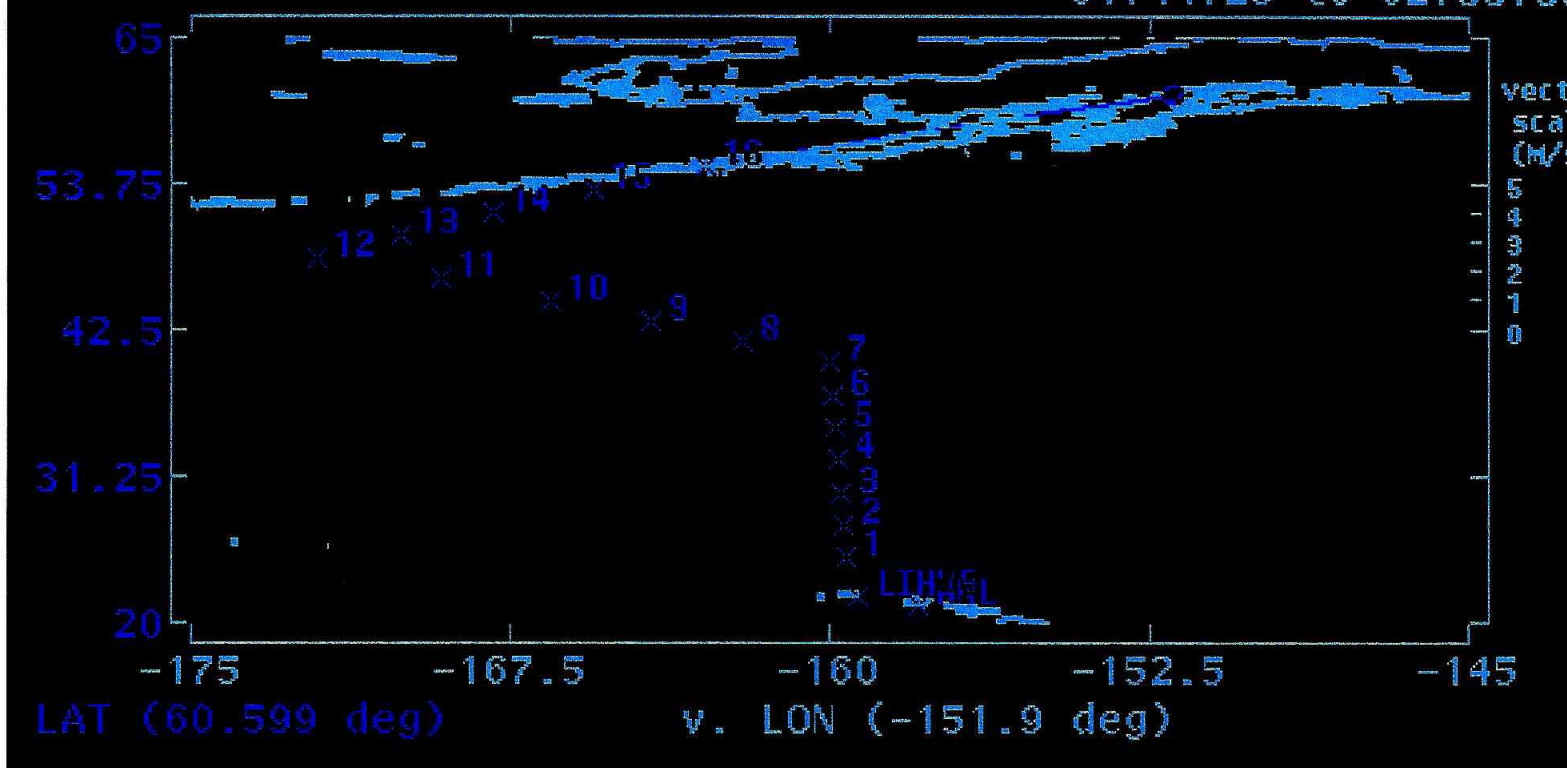
PANC 61 10.5N 149 59.8W

24 40
158 40

-60.0
253 / 55
-64
268 / 45

21082 MARK up

01:44:25 L0 02:33:33



NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: WS2002 Project No. 201 Flight No. RF14 Flight ID: 020306N
 SED Crew: ASG, SANS SOUCL, CARPENYER Mission: HNL-ANC
 Pre-Flight: 1905 Z Take-Off: 1958 Z Landing: 0252 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check
N A V	IRS #1		DWC ↓		
	IRS #2				
	GPS Honeywell #1				
	GPS Honeywell #2				
	GPS Collins				Off? ☒
Nose Radar - Collins				Off? ☒	
T E M P /			DWC ↓		
	Temp #1	Time: 1915 Temp: 24.237			Time: 0254 Temp: -4.9
	Temp #2	26.685			-4.6
	Temp #3	24.370			-4.5
	Temp #4	27.961			-5.3
	DP Left	1916 18.846		Cal. Time:	-21.2
	DP Right	22.762		Cal. Time:	-17.3
CRYO		N/I			
P R E S S	Attack Angle (ADCAOA)		DWC ↓		
	Angle of Attack (APx, DAPx)				
	Sideslip (BPx, DBPx)				
	Static Pressure (PS1M, PS2M)				
	Dynamic Pressure (QCxM)				
Radome Press. Lines		Checked? ☒ Date: 1/25/62			
S Y S T E M S	SATCOM (Flight Phone) ☒		085		Off CB? ☒
	Call COMSAT? ☒ (*292#)		CB's Checked? ☒		
	Iridium Phone		ON? ☒		OFF? ☒
	FCU/UPS/CB		085		UPS off? ☒
	MADS (WINDS/DISCWIN)		DWC		# DATs: 2
	Printer 1 (lp1)		Power? ☒ Paper? ☒		Printer Power off? ☒
	MADS Cal. Date:		QC time: 1941		QC time: 0253
	HAPS System		Time set? ☒ 085		# Msg.: # Fail:
	AVAPS System		ASG		
	Exterior Walk Around ☒		DWC ASG		
	Inspect Drop Sonde Chute Bolts				
M I S C	Down Port Door (Ozone Inst.)		Cover OFF? ☒ 085		Cover ON? ☐
	AVAPS Sondes		# On Board: 15	# Dropped: 19	# Good: 15
	Sci. Power Monitor				
	APN-232 Altimeter		085		
	Modem		Power On? ☒		
	Additional Instrumentation:		L1 60Hz IP CB ON? ☒	After Take Off	L1 60Hz IP CB OFF? ☒
	AL Ozone Data System		L1 400Hz CB ON? ☒	L1 Pump Switch ON? ☒	L1 400Hz CB OFF? ☒
		Computer ON? ☒		Computer OFF? ☒	
Crew Responsibilities Assigned			✓		

DAT Tape #1	On: 1940	Type: Verh 60m	Off: 2025
Comments: #2	2106		0256
Rebooted system 2028 - winds w/ not restart			
Put in SPARE SYSTEM DISK @ R3			