

AROBEX

Mission #5

Flight #5 000305H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	2
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2002.CON

Notes:

Takeoff: 2154Z

Land: 0531Z

The RA-232 was not turned on until 2157Z.

Prior to and during takeoff, radar altitude (RA-159) was set to zero from 2151:01-2154:39, and a spike was removed and patched from 2154:39-2154:52. RA-159 had 20 spikes that were removed and patched (2115:40-2216:10, 2232:20-2232:50, 2234:20-2234:50, 2237:40-2239:00(2), 2250:30-2251:00, 2254:10-2254:40, 2322:00-2322:30, 2326:10-2327:40(2), 2349:30-2350:00, 2351:50-2352:20, 2355:15-2355:45, 0012:50-0013:20, 0013:30-0014:15(2), 0016:50-0017:20, 0023:50-0024:50(2), 0057:00-0057:30). The RA-159 was replaced by the RA-232 plus a 12 meter offset (RA-159 was placed in standby mode for communications) from 0101:00-0109:30. The RA-159 had 3 spikes removed and patched (0244:20-0244:50, 0255:50-0256:20, 0524:50-0525:20). RA-159 was replaced by RA-232 prior to and during landing due to spikes (0525:20-0534:00).

Roll2 and pitch2 had 2 spikes removed and patched (0140:00-0140:30 and 0419:10-0419:40).

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1012.4 mb	1012.1 mb
Corrected tower pressure	1015.9 mb	1014.6 mb

The aircraft INE positions were re navigated 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 speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Flight Director: Tom Shepherd, (813) 828-3310 ext. 3053

Flt ID: 000305H	From: PANC	To: PANC
Flt No.: 00-30	Blk In: 0536	ATA: 0531Z
ETD: 2200Z	Blk Out: 2143	ATD: 2200 2154
ETE: 0600Z	Blk Time: 7.9	Flt Time: 0737 7.6
Sponsor Org: NESDIS	Program: AROBE	Purpose: SAR OVERPASS

AOC Personnel

AC: Kennel, P ✓	Sys Eng: Mcmillan, S ✓
CP: Taggart, B ✓	Data Sys: Hornbrook, C ✓
Nav: Newman, C ✓	Radar:
FE: Torrey, R. / MOORE, B ✓	GPS/BT: CARPENTER, D ✓
Avionics: Rogers, M ✓	Cld Phys:
FD: SNEPVED, T / CZYZYK, S ✓	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P ✓	PI	NESDIS
CARSWELL, J ✓	Sci	UMASS
CONNER, L ✓	Sec	UCAR/NESDIS
CASTELS, A ✓	Sci	UMASS
BROWN, Z ✓	Observ	AOC
CURRY, J ✓	Mech	AOC

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

APN 232 000 @ 2157
 ~2300 LF TLT 0.0
 2303 TA NOT XMTING - CB had popped
 2308 TA BACK

280/6

0048 Radome attack & slip pers. frozen up.

15 SET

0101 APN 159 down for phone call

25 BKA

0411 Hdg for buoy overflight - Buoy 5617N 14811W

-2/-5

0515 Buoy radars down

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center					AOCWF2
Flt ID: 000305H		Time Off: 2154		Time On: 0531	
	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)	
Pressure	1012.4	3000	1012.1	29.96	
	Number	Data Disposition/Date/Quality			
Slow/Fast Flt Lvl Tapes	2				
Radar Tapes	1				
Cloud Physics Tapes					
Video Tapes	2				
Flt Lvl Data Printout					
AXBT					
AXCP					
AXCTD					
GPS	11				
Video					
	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					
Remarks					

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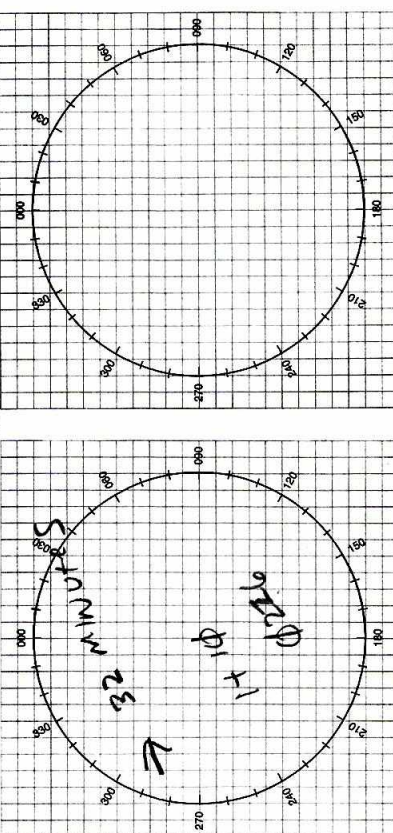
Form 413-50

Time	Lat	Lon	Trk	Hdg	Ta	Td	WD	WS	PA	GA	PS	SP	Remarks
221645	6003	15010	181	182	-27.8	-29.3	187	19.0	5380	3781	829.0	515.2	LVL 17K over land
230650	5624	15005	179	178	-24.8	-26.6	163	23.9	5315	5165	1008.1	517.9	LVL 17K in cld
233545	5425	15001	179	177	-23.4	-25.9	165	52.2	5314	5148	1002.6	518.0	LVL 17K in cld
234200	5359	15001	179	177	-22.0	-24.1	170	55.0	5312	5144	998.5	518.0	Drop 1
234420													SPLASH 1
235446													Begin descent to 10K
001200	5213	15001	208	202	-12.5	-12.7	177	50.7	3186	3030	1003.6	684.7	LVL 5K
003515	5059	15055	108	112	-11.4	-12.0	160	22.3	3184	2991	997.5	684.8	LVL 5K ^{POWER} _{Bare down}
011825	5018	14728	21	26	-11.8	-11.5	184	59.0	3183	3054	685.0	1005.8	DROP 2
020150													DESCEND to 5K
02650	5321	1420	80	83	-5.3	-14.9	129	19.7	1536	1527	841.8	1019.0	DROP 3
025444	5326	13950	267	269	-6.1	-20.1	21	9.8	1535	1530	841.9	1020.1	DROP 4
030332	5328	14055	267	267	-5.4	-33.0	70	4.1	1535	1526	841.9	1014.2	DROP 5
031158	5322	14200	262	260	-4.7	-16.2	150	7.1	1536	1522	846.7	1018.2	DROP 6 ^{SAR overpass} _{NO WINDS}
031320													Drop 7
032111	5318	1436	263	260	-2.9	-8.5	124	13.1	1533	1515	842.0	1015.9	Drop 8 NO winds
032720	5318	14316	263										9 NO Launch
													Drop 8 ^{aground} _{winds before splash}
033058	5311	14410	259	251	-2.5	-7.5	124	30.8	1535	1508	842.1	1014.8	Drop 10
034500													END leg climb to FL220 Radar
040315	5418	14641	338	337	-31.8	-33.9	182	27.9	6849	6687	419.4	1000.9	LVL FL220
042230	5554	14752	337	333	-33.4	-36.3	191	30.2	6848	6674	419.4	1005.1	LVL FL220
042640	5614	14809	337	333	-33.8	-36.3	190	30.9	6849	6672	419.4	1005.8	Drop 11 Buoy 46001

CLEARANCES			
FREQ	ALT	HDG	OTHER
			23522
			12946 13273
55			21825
42			
122			01522
			11E

MISSION LOG	PAGE ____ OF ____
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POSITION REPORT



TRANSMIT THE FOLLOWING MESSAGE TO ANY AIRCRAFT ON THE AIR-GROUND
FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON
ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

UHF/VOICE VHF/VOICE MF/VOICE HF/CW MF/CW
243.0 121.5 2182 KHZ 8364 KHZ 500 KHZ

DAYDAY, MAYDAY, MAYDAY NOAA NOAA _____

THIS IS NOAA _____, NOAA _____, NOAA _____

- POSITION _____ N / S _____ E / W AT _____ Z

- HEADING _____ TRUE/MAG TRUE/INDICATED

- AT _____ KTS

- FLIGHT LEVEL OR ALTITUDE _____

- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD

- NATURE OF EMERGENCY _____

- ASSISTANCE DESIRED _____

- PILOT INTENTIONS _____

- WE HAVE _____ ENDURANCE REMAINING

[illegible]

INS PERFORMANCE		INS 1	INS 2
BEGIN ALIGN TIME		2006	2006
ALIGN STATUS (0-5)		0	0
END NAV TIME		7.5	7.5
START NAV TIME		2130	2130
DELTA T		7.5	7.5

TERMINAL ERRORS		INS 1	INS 2
DELTA LAT	-3		
DELTA LON	-15		
RGS	8		1
RADIAL ERROR	3		1

REMARKS
1953 030/4
10 6500 Few
100000 25000 OVC
-1/-6 30,02
115 6A 32/6L
" " Delta
" " J

NOAA • AOC • SED

N42RF AVAPS DROP LOG

Project : AROBEX '00

Mission : 4

Flight ID : 000306A

Take Off : _____

Landing : _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Comments
1	984 715 247	1	-3.9	0234	238	DWC	Good Drop
2	972 340 075	2	-1.4	0118	14	CPA	Good Drop
3	984 715 246	1	0	0226	25	YH	✓
4	972 340 017	2	-1.5	0254	33	CP	—
5	972 440 010	1	0	0303		CP	—
6	984 715 080	2	-1.7	0311		CP	Late winds
7	974 510 132	1	-2.2	0312	15	YH	✓
8	984 715 270	2	-1.9	0321		CP	no launch detect
9	984 715 160	1	-1.8	0322		CP	Late winds
10	993 645 171	3	0	0330	11	YH	✓
11	984 715 014	1	-1.7	0426	19	CP	—
12	984 715 240	2	-1.7				
13	993 645 122	1					
14	993 655 054	2					
15	993 655 140	1					

