AROBEX
Mission #8

Flight #8 000312H

Sensor or system	Number or Name
INE	1
Accelerometer	1
Temperature Probe	1
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: 0224Z
Land: 0530Z

Dewpoint temperature (DW1) exceeded ambient temperature by 1°-2°C several times during the flight as aircraft passed through saturated conditions. Specifically, between 0442:00-0444:30 and 0455:00-0507:00 the dewpoint temperature exceeded the ambient temperature by almost 2° C. During these times both dewpointers were oscillating, and therefore neither could be used as a substitution for the other.

Prior to and during takeoff, the radar altimeter (RA-159) was replaced by the RA-232 (0221:01-0224:39 due to spiking. There were 7 spikes in the RA-159 data that were removed and patched (0328:30-0329:00, 0341:20-0341:50, 0403:00-0403:30, 0405:10-0405:40(2), 0419:15-0419:45, 0421:00-0421:30). The RA-159 was replaced by the RA-232 (communication reasons) with a +10 meter offset from 0457:30-0506:02. Prior to and during landing the RA-159 was replaced by the RA-232 (0529:21-0533:00) due to spiking.

	Takeoff	Landing
Aircraft static pressure	1005.9 mb	1007.5 mb
Corrected tower pressure	1009.5 mb	1010.5 mb

The 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 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

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

AOCWF1

Flt ID: 000312H	From: PANC	To: PANC
Flt No.: 00-33	Blk In: 0536	ATA: 0530
ETD: 0130 Z	Blk Out: 0214	ATD: 0224
ETE: 0500 Z	Blk Time: 3.4	Flt Time: 3:06 3.1
Sponsor Org: NESDIS	Program: AROBEX	Purpose: Coordinated SAR OVERPASS

AOC Personnel

AC: KENUL, P ✓	Sys Eng: McMillan, S ✓
CP: TAGGART, B ✓	Data Sys: HORNBROOK, C ✓
Nav: NEWMAN, C ✓	Radar:
FE: MOORE, B. ✓	GPS/BT: CARPENTER, D ✓
Avionics: ROGERS, M. ✓	Cld Phys:
FD: SHEPHERD, T ✓	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P ✓	PI	NESDIS
CONNER, L ✓	SCIENTIST	UCAR/NESDIS
CASTELLS, A ✓	SCIENTIST	UMASS

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

45 min delay - CSCAT problems w/antenna spinner

APN 159 STBY ~0450-0505

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AOCWF2

Flt ID:	Time Off:	Time On:
0003/2H	0224Z	0530Z

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1005.9	29.81	29.84	1007.5

	Number	Data Disposition/Date/Quality	
Slow/Fast Flt Lvl Tapes	2		
Radar Tapes	1		
Cloud Physics Tapes			
Video Tapes	3		
Flt Lvl Data Printout			
AXBT			
AXCP			
AXCTD			
GPS	11	(1 BAD)	

Video

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

Remarks

Flight ID: 000312H

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

Form 413-50

Time	Lat	Lon	Trk	Hdg	Ta	Td	WD	WS	PA	GA	PS	SP	Remarks
025855	6034	14651	175	173	-12.2	-11.0	156	25.1	2826	2716	716.8	1010.2	DR 1 in cld
031448	5937	14652	179	175	-6.8	-7.2	130	23.8	1912	1822	803.6	1009.7	" 2 in cld FL060
032447	5914	14733	262	260	-7.6	-16.8	145	15.0	1913	1819	803.5	1010.1	3 undercast
033135	5909	14830	262	260	-7.9	-19.9	151	13.1	1913	1813	803.7	1009.8	4 undercast
033800	5906	14922	261	260	-9.5	-12.7	146	10.5	1912	1810	803.7	1010.7	DR 5 OP BKN BLO
034658	5900	15030	260	257	-9.4	-13.7	128	19	1927	1818	802.2	1009.8	6 BKN BLO
0353													CLIMB to 7K
035500	5854	15130	258	252	-12.0	-11.5	150	26.9	2302	2167	766.1	1008.9	DR 7 undercast
0400													REVERSE TRK 7K
041817	5900	15000	81	84	-10.5	-14.1	163	11.8					DR 8 NO Launch
041854	5901	14953	81	84	-10.5	-15.0	168	12.0	2297	2182	766.0	1009.6	9
042332	5904	14922	81	84	-9.4	-25.2	162	10.0	2298	2187	766.0	1009.3	10 BKN BLO
042612	5906	14900	81	84	-9.6	-22.5	163	10.0	2298	2189	765.9	1009.9	DR 11 BKN BLO
051520	6057	14833	279	278	-14.4	-15.4	118	39.3	3041	2000	696.8	884.0	VECTORING TO PANC

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
PWC	ARGOBEX	NEWMAN	KENUL	CZYZYK	0130	11 MAR 00

WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS

INS PERFORMANCE	INS 1	INS 2
BEGIN ALIGN TIME	0000	0000
ALIGN STATUS (0-5)	0	0
END NAV TIME	0530	0530
START NAV TIME	0200	0200
DELTA T	3.5	3.5

TERMINAL ERRORS	INS 1	INS 2
DELTA LAT	+.9	-1.0
DELTA LON	-1.4	+2.4
RGS	2	0
RADIAL ERROR	1.0	1.5

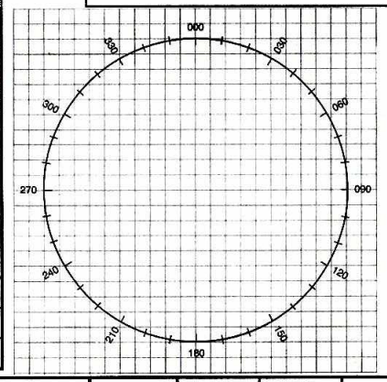
REMARKS		
-2/-12	29.81	
"N"	360/9	10

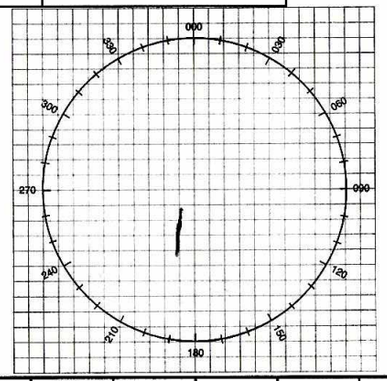
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER

CLEARANCES			
FREQ	ALT	HDG	OTHER
			ANC ANC 2
			10,000 118.6
			SQ 5271
	030/9		"S" 6000 SCT
	32		10000 BKN
			20000 BKN
			6R

MISSION LOG

PAGE ___ OF ___





POSITION REPORT

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

EMERGENCY MESSAGE

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY 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

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA _____, NOAA _____, NOAA _____

- POSITION _____ N / S
  _____ E / W AT _____Z
- HEADING _____ TRUE/MAG
- AT _____ KTS TRUE/INDICATED
- 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

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	TIME	ETA	REMARKS 35K
0214																					TAXI 29.81
0224																					TOFF
0530																					LAND
0536																					BLOCK

NOAA • AOC • SED

N42RF AVAPS DROP LOG

Project : AROBEX '00 Mission : #7 Flight ID : 0003124

Take Off : Landing :

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Comments
1	994 325 181	1	0	0258	16	DWC	Good Drop
2	984 715 259	2	0	0314	14		
3	994 325 197	1	0	0324	20		
4	984 715 071	2	0	0331	15		
5	994 315 035	1	0	0338	25		
6	994 325 097	2	-1.8	0346	16		
7	984 715 077	1	-1.5	0355	28		
8	990 415 155	2	-2.1	0418			No launch detect
9	984 715 013	1	-2.7	0418	28		Good Drop
10	994 338 022	3	0	0423	25		
11	993 948 015	1	0	0426	9		
~~12~~	~~994 925 244~~	~~2~~	~~0~~				
~~13~~	~~993 915 006~~	~~1~~	~~0~~				
~~14~~	~~994 024 121~~	~~2~~					

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60146
59146
59149
59153
60N
55N
152W
148W
144W