

AROBEX Mission #3

Flight #3 000227H

Sensor or system

INE
Accelerometer
Temperature Probe
Dew Point Probe
Altitude (for vertical wind)
Static Pressure
Dynamic Pressure
Time Source
Constants File

Number or Name

2
2
2
1
RA-159
Rosemount Fuselage
Rosemount Fuselage
Micro 99
CO2002.CON

Notes:

Takeoff: 0256Z

Land: 0911Z

Dewpoint temperature (DW1) exceeded ambient temperature by 1° C or less seven times during the flight as aircraft passed through saturated conditions.

The roll and pitch from inertial #2 had a spike that was removed and patched at 0449:50-0450:10.

Radar altitude (RA-159) was replaced by the RA-232 prior to and during takeoff due to spikes (0253:01-0300:04). The RA-159 had 33 spikes that were removed and patched (0309:00-0309:30, 0311:15-0311:40, 0313:10-0313:40, 0322:00-0322:30, 0323:50-0324:10, 0325:00-0325:30, 0334:00-0334:20, 0339:40-0340:10, 0341:20-0342:00, 0349:10-0349:40, 0351:10-0352:20(2), 0355:00-0355:20, 0401:50-0402:20, 0407:30-0408:00, 0410:00-0410:20, 0416:50-0417:20, 0421:00-0421:20, 0437:20-0437:50, 0455:20-0455:50, 0502:30-0503:00, 0509:40-0510:10, 0512:40-0513:10, 0517:50-0518:10(2), 0518:40-0519:10, 0601:00-0607:00(3), 0627:00-0627:30, 0703:20-0703:50, 0726:00-0726:30, 0755:00-0755:30). The RA-159 was replaced by the RA-232 (RA-159 placed in standby mode for communication reasons) from 0804:50-0811:15. The RA-159 was replaced by the RA-232 with a +18 meter offset (communications) from 0816:45-0821:31. The RA-159 was replaced by the RA-232 with a +15 meter offset (communications) from 0826:40-0832:00. The RA-159 was replaced by the RA-232 prior to and during landing due to spikes (0910:00-0914:00).

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1001.0 mb	1001.2 mb
Corrected tower pressure	1003.7 mb	1004.4 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

AOCWF-1

Fit ID: 000227H	From: PANC	To: PANC
Fit No.: 00-28	Blk In: 08 79 0919	ATA: 0911
ETD: 0300Z	Blk Out: 0245Z	ATD: 0256Z
ETE: 1100Z	Blk Time: 0634 6.6	Fit Time: 0615 6.3
Sponsor Org: NESDIS	Program: AROBEX	Purpose: CSCAT/KUSCAT COLD FRONT INVESTIGATION

AOC Personnel

AC: KENUL, P ✓	Sys Eng: McMillan, S ✓
CP: TAGGART, B ✓	Data Sys: HORN BROOK, C ✓
Nav: NEWMAN, C ✓	Radar:
FE: TORREY, R ✓ / MOORE, B ✓	GPS/BT: CARPENTAR, D ✓
Avionics: ROGERS, M ✓	Cld Phys:
FD: CEZEYK, S ✓ / SHEPHERD, T ✓	

Participating Scientists/Visitors/AOC

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

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

Fly coordination with Radar Sat overpass at 0346 then proceed
 55W to investigate pre/post frontal stc winds inside 150 nm
 radius circle centered @ 5330N/15600W
 Reboot to different CPU 20V22
 Back up @ ~ 0426
 Run setup
 Rs-159 in standby 0805 - 0811
 " " " 0818 - 0821:30

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AOCWF2

Flt ID: **000227H**

Time Off: **0256Z**

Time On: **0911**

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1001.0	29.64	1001.0	29.66

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	4	Czyzyk/Shepherd
Radar Tapes	1	Czyzyk/Shepherd
Cloud Physics Tapes	0	
Video Tapes	1	Czyzyk/Shepherd 2/27/00
Flt Lvl Data Printout	1	Paul Chang 2/27/00
AXBT		
AXCP		
AXCTD		
GPS	11	

Video

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

Remarks

000227H

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Form 413-50

TIME	LAT	LONG	TRK	Hdg	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
030035	61 07	150 23	219	219	-8.2	-11.1	118	6.4	1602	1464	835.0	1005.1	LEVEL SK PA CLIMB
030000	60 39	151 10	219	218	-11.5	-17.4	158	10.7	2214	2018	774.1	1001.2	LEVEL TIC
031130	60 33	151 19											OVER WATER
031700	60 18	151 46	224	223	-12.1	-14.9	145	9.2	2197	2026	775.7	1005.0	OVER CLO LVR
032215	60 06	152 15	221	220	-12.6	-14.8	157	13.1	2257	2091	769.5	1005.4	PT #1
033145	59 30	152 23	188	185	-12.1	-15.7	136	20.5	2285	2112	767.3	1004.4	DROP #1 WIND DIED
033522	59 16	152 27	189	185	-12.5	-15.4	136	23.1	2283	2110	767.4	1004.7	DROP #2
033910	58 59	152 33	220	215	-12.5	-14.9	125	23.6	2246	2110	767.3	1003.8	PT 2
034600	58 41	153 03	221	216	-12.1	-18.0	121	24.2	2283	2103	767.3	1002.9	DROP #3 / RAINBOW
040353	57 47	154 30	229	223	-11.4	-14.4	138	28.7	2283	2086			DROP #4 NO CLOUDS
040451	57 45	154 38	230	223	-11.2	-14.7	135	31.2	2285	2086	767.3	1000.1	DROP #5
041347	57 21	155 27	232	224	-11.8	-21.5	102	39.9	2283	2049	767.3	998.7	DROP #6 WINDS 165 Began climb to 100
041600													
042715	56 41	155 59	175	174	-14.1	-15.3	161	33.9	3295	3034	675.2	993.2	
043830	55 57	155 59	224	219	-13.3	-14.7	186	40.2	3293	3033	675.1	991.2	ENTRY
045200	55 23	156 59	225	220	-13.1	-14.8	180	37.5	3292	3000	675	987.9	WINDS in front of front
050000	54 58	157 42	226	220	-12.2	-12.0	178	43.7	3293	2986	675.6	984.8	Passing thru frontal band
050343	54 52	157 54											Out of REAR
051000	54 36	158 16	142	151	-13.2	-33.1	189	49.7	3332	3012	672.1	983.6	Behind front
052618	54 02	157 20	89	97	-12.5	-39.2	198	37.8	3331	3041	672.1	982.8	DROP #6
053530	54 03	157 58	87	98	-11.4	-18.9	178	44.1	3328	3065	672.4	982.3	DROP #7
054505	54 05	154 47	87	97	-10.7	-11.9	187	38.8	3327	3083	672.4	980.8	DROP #8
055952	58 08	154 51	265	257	-10.9	-12.1	199	45.6	3281	3031	676.5	988.9	Personnel splash
061640	54 06	156 41	271	263	-13.0	-32.8	214	50.1	3278	3001	676.5	982.3	Behind front
062720	54 08	157 49	33	325	-14.7	-29.7	215	56.2	3362	3052	679.4	987.1	Turn
064917	55 21	157 25	065	076	-13.3	-35.4	170	43.8	3362	3055	679.4	986.3	DROP 9
070130	55 42	155 57	67	77	-13.2	-15.1	156	39.7	3320	3041	672.9	988.5	DROP #10 DND
070322	55 46	155 40	67	77	-13.4	-14.5	149	38.3	3318	2990	673.3	986.6	DROP 11
0728	55 44	156 20											C. Front
073110													Turn Home
073635	56 04	156 28	31	32	-12.4	-13.3	207	57.7	3336	3048	671.6	987.7	C. Front
083845	59 21	152 07	28	34	-18.2	-31.6	151	27.5	3308	3311	673.7	1002.3	Cleat air

REMARKS	
4" 0153 020/6	
10 10000	
-2/-10 29.64	
11.5 6R Dpt 32/6	

NOAA • AOC • SED

N42RF AVAPS DROP LOG

Project : AROBEX '00

Mission : 2

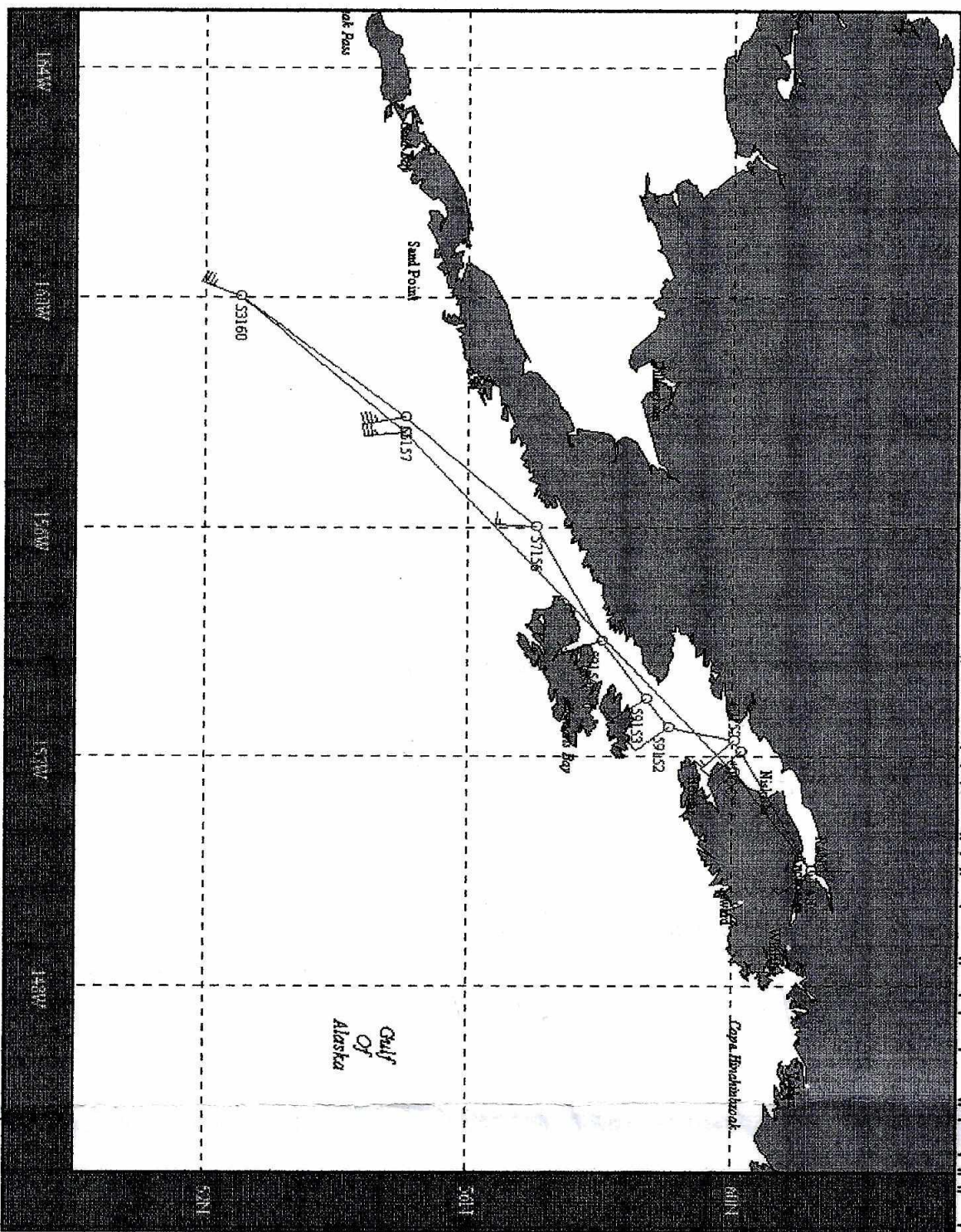
Flight ID : 000226A

Take Off: _____

Landing : _____

[illegible]

1. The map shows the Gulf of Alaska and the surrounding landmasses. The coastline of Alaska is visible on the left, with labels for "Cape Baranovsky" and "Kodiak". The Gulf of Alaska is labeled "Gulf of Alaska" in the center. The map includes a grid of latitude and longitude lines.



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