



**NOAA P-3 N43RF
SALLJEX 2003
FLT # 4**



Flight ID: I030118

Sensor or system

Number or Name

INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	2
Altitude (for vertical wind)	Pressure Altitude
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3031.CON

Take off: 1519Z

Land: 2148Z

Notes:

There were no time gaps.

The RA-159 altimeter was substituted with the RA-232 from 151601 - 152130 (take off) and 213930 - 215100 (landing) due to spiking.

All other instruments worked optimally during the flight.

The APN-159 was used for surface pressure calculations.

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.

	Takeoff	Landing
Aircraft Static Pressure	967.3 mb	965.8 mb
Corrected Tower Pressure	1011.9 mb	1011.9 mb

Flight Director:	Tom Shepherd / Paul Flaherty (training)
Phone #:	(813) 828-3310 ext. 3053

Flt ID: 030118I	From: SLVR	To: SLVR
Flt No: 03-025	Blk In: 2151z	ATA: 2148z
ETD: 1500z	Blk Out: 1506z	ATD: 1519z
ETE: 8+00	Blk Time: 6.7	Flt Time: 6.5
Sponsor Org: JOSS/NUSSL	Program: SALLJEX	Purpose: Flt #4 Frontal Boundary

AC: STRONG, TV	Sys Eng: LYNCH, TV
CP: TAGGARTY SILAH, M	Data Sys: TONG, RV
Nav: BRACOB / ADLER, JV	Radar:
FE: FLOYD, DV	GPS/BT:
FD: FLAHERTY / SHEPHERD, TV	Cld Phys: Sans Souci
Avionics: RODGERS, M	MAINT: MITCHELL, RV

Name (Last, First)	Activity on Aircraft	Affiliation
DOUGLAS, MIKE	PI	NUSSL
ZIPSER, ED	RADAR	UNIV OF UTAH
PAEGLE, JAN	OBS	"
CAMPETELA, CLAUDIA	"	UNIV OF B.A.
SALIO, PAOLA	"	"
GARRAUD, RENE	"	UNIV OF CHILE
PINTO, RICHARD	"	AASANA
NICOLINI, MATILDE	"	UNIV. of B.A.

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #) LATE TAKEOFF DUE TO FUELING	1920 380
---	-------------

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

Flt ID: 030118I Time Off: 1519Z Time On: 2148

Pressure: 967.3 A/C (Take Off) 29.88 Wx Station (Take Off) 965-8 Wx Station (Land) 2988

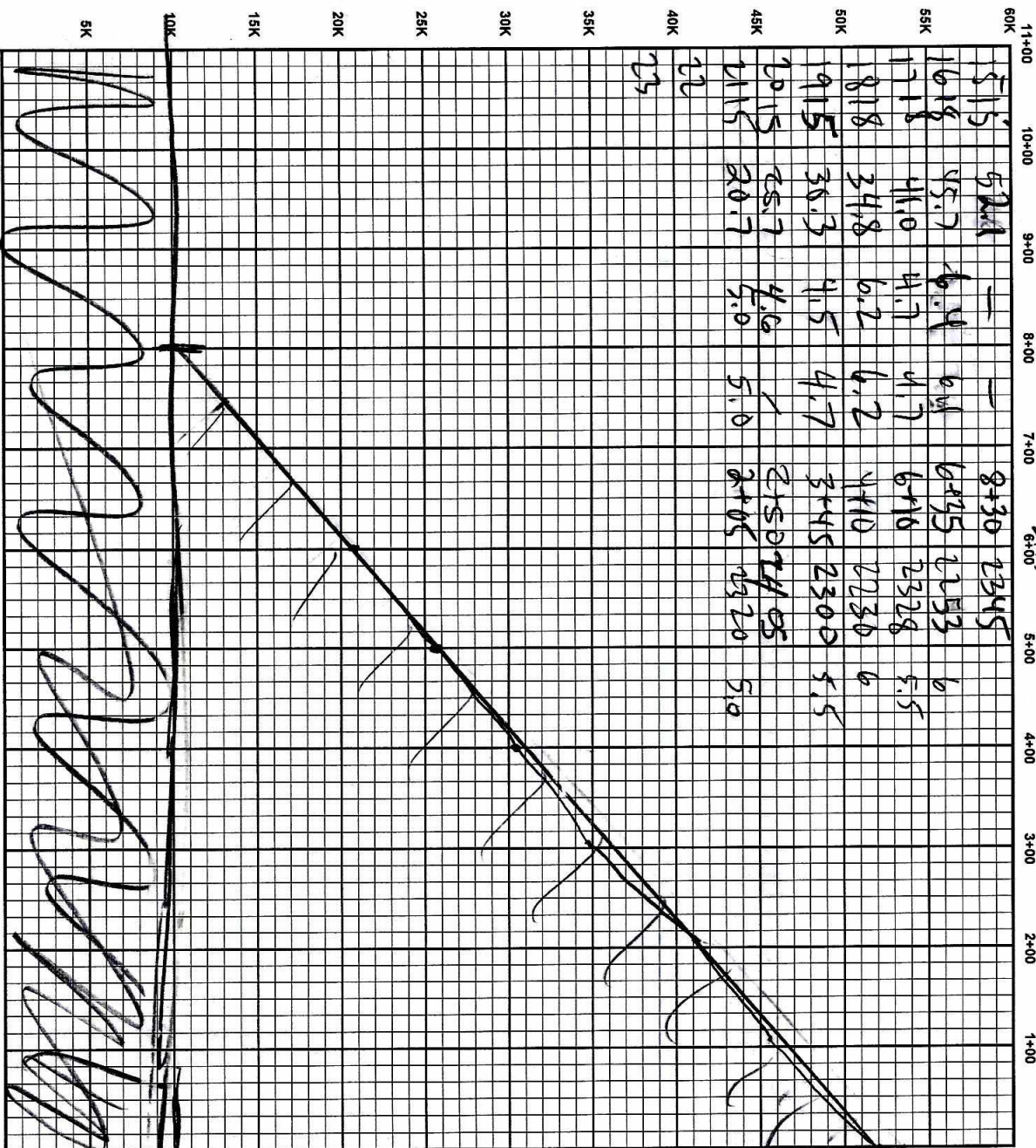
	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	2	
Cloud Physics Tapes	0	
Video Tapes	4	
AXBT		
AXCP		
AXCTD		
Dropsondes		

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

Remarks

RANGE CONTROL GRAPH

0015 2315 2215 TIME REMAINING 2015 1915 1815 1715 1615 1515



ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

DISTANCE REMAINING

WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

ENROUTE FUEL	
ENROUTE TIME	
ENROUTE FUEL (6K 5K 4 5K FUEL)	
RESERVE AT DESTINATION	
REQUIRED RAMP	
ACTUAL RAMP FUEL	

TACTICAL (OFFSTA TO DESTINATION)	
4 ENG 3 ENG	
DISTANCE (OFFSTA TO DEST)	
ENROUTE TIME (OFFSTA TO DEST)	
BURN RATE (LBS/HR)	4500 5500
ENROUTE FUEL REQUIRED	
RESERVE AT DESTINATION	
FUEL AT OFFSTA	

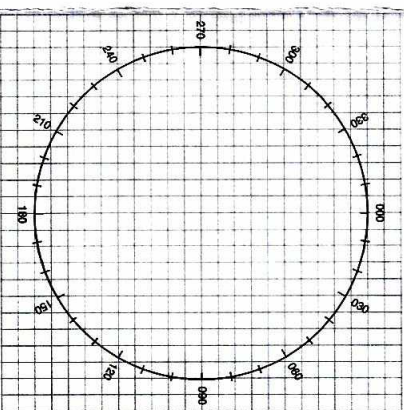
POINT OF SAFE RETURN	
4 ENG 3 ENG	
ETP DISTANCE (TO DEPARTURE)	
ENROUTE TIME (TO DEPARTURE)	
BURN RATE (LBS/HR)	4500 5500
FUEL REQUIRED	
RESERVE AT DEPARTURE	
PSR FUEL	

PRESS ALT	
200	250 300 350
10,000	1.0 1.0 .99 .99
20,000	.99 .98 .97 .97
30,000	.97 .96 .95 .94
40,000	.96 .94 .92 .90

CEX - TRUE BEARING METHOD			
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HC/D	
CORR	
HC	
Z	
ZN	

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			
CE			
- VAR			
= DEV			



TRUE AIRSPEED CROSS-CHECK					
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT
1532	210	25K	X	X	+33
					224
					225

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
1	5 17-38.7 63-08.1		183	9W	174						752	250	137 137	+33 +33		1600	1559	-> SLVR 1
2	19-55.8 62-53.6		100	8W	192						SK	250	96 123	+25 +58		1625	1626	-> SLVR 2
3	21-30.0 63-15.0		122	10W	112						✓	✓	165 398	+42 +40		1708	1710	-> SLVR 3
4	22-30.0 60-30.0		042	13W	029						✓	✓	227 625	100 240		1809	1808	-> SLVR 4
5	19-10.0 54-35.0		298	9W	269						✓	✓	275 900	110 3450		1918		-> SLVR
6	17-38.7 63-08.1		872	9W	863						✓	✓	170 1070	445 445				-> SLVR 5
7	16-20.0 60-30.0		316	8W	388						✓	✓	140 1230	250 5235				-> SLVR 6
8	14-50.0 62-45.0		198	9W	189						✓	✓	170 1460	155 6430				-> SLVR
6	17-38.7 63-08.1																	

Flight ID: 030118I

Page 1 of 2

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

Form 413-50

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
150715	1738	6308	✓	✓	325	06	29.9	22.6	388	7590	—	967.3	.0	ROLL
153130	1816	6304	175	177	226	3.8	24.2	19.7	1106	686	960.0	893.8	64.8	DESCENT TO 1000' RA
153230	1820	6304	173	176										1000' RA
153830	1842	6301	172	175	222	7.5	16.0	10.8	2448	2181	965.2	751.7	71.8	8000' PA
154500	1905	6258	174	174	143	8.9	28.5	22.6	742	232	953.8	927.2	76.9	1000' RA
155040	1926	6256	172	174	153	6.2	14.5	13.0	2473	2051	948.8	749.3	70.0	8000' PA
155640	1946	6253	173	173	168	13.0	24.7	22.1	840	302	947.1	916.4	71.1	1000' RA
160210	2007	6256	196	195	129	10.7	13.2	11.7						8000' PA
161410	2049	6341	181	181	129	11.7	12.3	11.7	2466	1955	939.2	750.2	70.9	8000' PA
162447	2128	6310										TURN 2 +		1000' RA
163640	2147	6229	109	68	027	12.9	6.2	0.5	3873	3821	979.2	626.8	64.9	12600' PA
164820	2203	6143	112	114										1000' RA
165345	2209	6126	113	111	033	16.4	15.1	9.7	2462	2390	987.1	750.5	67.7	8000' PA
170050	2219	6059	107	109	163	8.9	23.7	20.1			991.1	957.3	61.0	1000' RA
170802	2229	6034	118	117	057	10.4	15.8	7.5	2462	2436	992.1	750.4	68.3	8000' PA
170843														TURN 3
171649	2205	6015	030	033	180	11.1	26.8	21.3	455	305	993.1	959.6	66.9	1000' RA
172025	2120	5949	026	028	193	11.2	27.8	21.9	442	307	994.8	961.5	68.0	1000' RA
173630	2101	5937	030	031	031	10.2	14.9	8.9	2467	2470	995.8	749.9	67.5	8000' PA
174350	2036	5923	028	028	257	2.2	31.9	19.2	425	300	995.4	967.2	68.1	1000' RA
175025	2013	5911	027	028	036	5.2	14.8	9.8	2463	2483	997.7	750.3	72.5	8000' PA
175710	1949	5856	028	029	195	4.1	29.8	23.4	421	273	993.0	962.9	74.3	1000' RA
180350	1928	5844												8000' PA
180845	1911	5835												TURN 4
181200	1906	5846	278	278	217	3.8	30.2	21.7	440	298	993.7	961.7	69.3	1000' RA
181830	1859	5910	289	290	110	2.5								8000' PA
182500	1851	5936	289	290	288	3.1	30.1	19.7	600	273	992.8	943.0	77.7	1000' RA
183130	1843	6001	290	292										8000' PA
183800	1834	6025	290	292	316	8.1								1000' RA
184345	1827	6047												8000' PA
191130	1754	6227	291	293	029	2.1	12.6	8.8	3059	2904	972.3	955.8	66.5	10000' PA
195520	1642	6113	061	063	241	16.6	14.1	11.7	2477	2145	959.4	749.0	70.5	8000' PA
200700	1618	6031	299	297	221	15.5	14.2	11.8	2483	2280	972.8	740.0	66.1	TURN 6 8000' PA
203030	1531	6145	308	308	320	11.4	23.0	19.3	688	351	973.6	733.4	78.8	10000' RA
203534	1519	6203	305	304	268	13.9	14.6	8.7	2491	2319	975.1	747.7	71.3	8000' PA
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Flight ID: 030118I

Page 2 of 2

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

Form 413-50

[illegible]

14° 50' 5"
62° 45'

