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

AOCWF1

Flt ID: 010131I	From: KMRY	To: KMRY
Flt No: 01–12	Blk In: 0324Z	ATA: 0321Z
ETD: 1030Z	Blk Out: 1830Z	ATD: 1841Z
ETE: 2100Z	Blk Time: 8.9 8:54	Flt Time: 8.7 8:40
Sponsor Org: NOAA/ETL	Program: PACJET	Purpose: SUPER IOP (4)

AOC Personnel

AC: KENUL, P ✓	Sys Eng: ROLES, J ✓
CP: HALVERSON, H ✓ / TENNESEN, D ✓	Data Sys: GOLDSTEIN, A ✓
Nav: ADLER, J ✓	Radar:
FE: TORREY, R ✓ / Floyd, D	GPS/BT: BARR, J ✓
FD: SHEPHERD, T ✓	Cld Phys:
Avionics: Rogers, M ✓	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
NANCE, L ✓	PI	NOAA/ETL
SMULL, B ✓	CoPI - RADAR	NOAA/NSSL
PERSSON, O ✓	Co PI	NOAA/ETL
MILLER, D ✓	DATA SYN	NPS
Struthwolf, M ✓	OBS	NWS
Cooper, O ✓	OZONE	NOAA/AL (UofVa)
ESTRADA, M ✓	OBS	OPARS
~~GREGORIA, J~~	~~REPORTER~~	~~NPS~~

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

~~36~~ AVAPS locked up and had to be rebooted at
~~39~~
~~44~~ ~ 0200 – missed handup on 017

14
3
42
17 45 3
51

OB 01 – 23

47

2681
1841
8:40

2684
1830
8:54

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

AOCWF2

Flt ID:	Time Off:	Time On:
010131I	1841 Z	0321 Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1018.1	30.29	30.25	1017.8

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	2	
Cloud Physics Tapes	0	
Video Tapes	4	
AXBT		
AXCP		
AXCTD		
Dropsondes	20	AVAPS Locked up DIT @ 728 mb

Video

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

Remarks

Pacjet
IOP 4

Flight #4 010131I

Sensor or system	Number or Name
INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	2
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3012.CON

Notes:

Takeoff: 1841Z
Land: 0321Z

The flight was clean and error free. The RA-159 was replaced by the RA-232 during take off and landing (183801-184500 takeoff; 031130-032200 landing).

	Takeoff	Landing
Aircraft static pressure	1018.1 mb	1017.8 mb
Corrected tower pressure	1025.7 mb	1024.4 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

Flight ID: 010131I

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
190940	3637	12411	264	267	050	11.9	-10.6	-40.1	4809	4976	1020.2	554.1	82.3	CLR ABV SCT BLO FL160
191750	3632	12502	273	275	032	6.9	-9.9	-38.7	4808	4979	1019.6	554.2	85.9	DROP 1
1924														Splash 1
193550	3632	12647	270	272	073	5.4	-10.1	-39.1	4903	5081	1018.5	547.2	77.9	BKN BLO CLR ABV
194311	3631	12730	269	270	090	5.4	-10.4	-27.5	4909	5085	1019.1	546.7	83.7	winds 40 CLR BLO D2
194930														Splash 2
201353	3630	13031	266	268	278	8.8	-14.5	-24.5	5515	5698	1018.0	504.1	83.7	D3 winds 60 FL180
203425	3634	13229	266	266	244	22.2	-14.3	-22.7	5512	5696	1017.6	504.3	82.9	SCT BLO Ci ABV
204825	3632	13309	270	269	243	21.5	-14.2	-21.1	5510	5691	1017.2	504.4	87.9	D4 winds
210630	Climb	to	FL	190										
210944	3631	13548	280	278	256	34.8	-16.5	-19.3	5834	6010	1015.8	482.6	79.8	winds 255 D5 BKN BLO OVC ABV
212910	3631	13734	268	265	241	39.1	-16.3	-18.6	5830	5989	1012.8	482.9	69.9	in cld FL190
213539	3630	13806	267	265	245	42.8	-16.5	-18.8	5831	5985	1013.0	482.8	69.6	winds 60 S D6 in cld
220810	3629	14048	273	268	239	54.6	-18.5	-19.9	5957	6084	1013.4	474.6	80.3	winds 225 D7 FL195
223440	3632	14300	322	308	252	69.2	-19.2	-21.3	5957	6058	1011.7	474.7	79.3	D8
225844	3750	14430	317	308	262	63.7	-20.7	-35.3	5954	6000	1009.8	474.8	89.1	D9 winds 30 FL195
232038	3907	14549	104	112	249	66.9	-21.8	-36.8	5953	5935	10053	474.8	87.5	D10 RECCO
234215	3900	14300	091	095	259	62.5	-27.9	-40.6	6717	6752	1014.1	427.2	79.0	D11 RECCO
000553	3900	14080	091	100	233	66.1	-25.1	-28.1	6718	6795	1010.3	427.2	74.4	D12 winds 255 FL220
003045	3904	13701	038	036	233	55.0	-24.8	-27.7	6714	6835	1015.3	427.4	77.8	D13 FL220
004917	4030	13526	036	035	228	54.7	-24.9	-27.3	6713	6820	1013.5	427.5	77.9	D14 FL220 in cld
011026	4202	13345	128	138	218	49.5	-27.5	-30.5	7030	7137	1014.7	408.9	73.6	D15 winds 265 FL230
011657	4145	13306		Climb	to	FL	240							
013014	4111	13152	121	130	229	45.2	-28.9	-32.2	7342	7499	1017.5	391.2	68.0	D16 (late) FL240
014843	4020	13009	123	130	230	29.6	-31.3	-39.8	7653	7849	1023.0	374.3	70.2	D17 FL250 NT.
														D17 failed @ 728 mb
020657	3927	12819	123	127	256	25.3	-33.6	-45.9	7940	8155	1027.2	359.1	72.3	D18 FL260
022552	3833	12626	119	122	261	20.5	-34.3	-50.4	7942	8174	1031.9	359.0	74.9	D19 FL260
023950	3755	12500	122	122	324	18.3	-34.8	-45.2	7944	8174	1033.7	358.9	76.0	FL260
024430	3743	12430	116	115	334	16.0	-35.3	-53.0	7946	8172	1035.2	358.8	77.2	D20 FL260

	193000	+0.3	−0.5	36 31.7	−126 13.1	✓
	201500	+0.3	−0.5	36 30.1	−130 36.7	✓
	210000	+0.7	−0.5	36 31.9	−134 55.3	✓
	214500	+0.9	−0.6	36 29.2	−138 51.9	✓
5)	223000	+1.4	−0.6	36 30.0	−142 38.0	✓
	231500	+2.1	−0.5	38 47.0	−145 37.5	✓
	000000	+3.7	−1.4	X 38 60.0	−140 43.2	✓ ?
	004500	+4.6	−2.8	40 9.6	−135 45.9	✓
	013000	+5.3	−3.6	41 11.7	−131 54.1	✓
10)	021500	+4.7	−5.9	39 4.1	−127 32.0	✓
	024500	+4.4	−6.1	37 42.0	−124 28.2	✓
	030000	+3.9	−6.5	37 7.6	−123 6.1	✓
	031500	+3.3	−7.2	36 40.8	−122 7.3	✓
14)	032200	+3.2	−7.6	36 35.2	−121 50.5	✓

1838
0322

IOP4 (SUPER) 010131 I

ANI 1
INE 1
TT 1
DPT 2
ALT RA159

Substitute RA159 with RA232 183801-184500 ✓
031130-032200 LANDING ✓

DPT 2 > TA

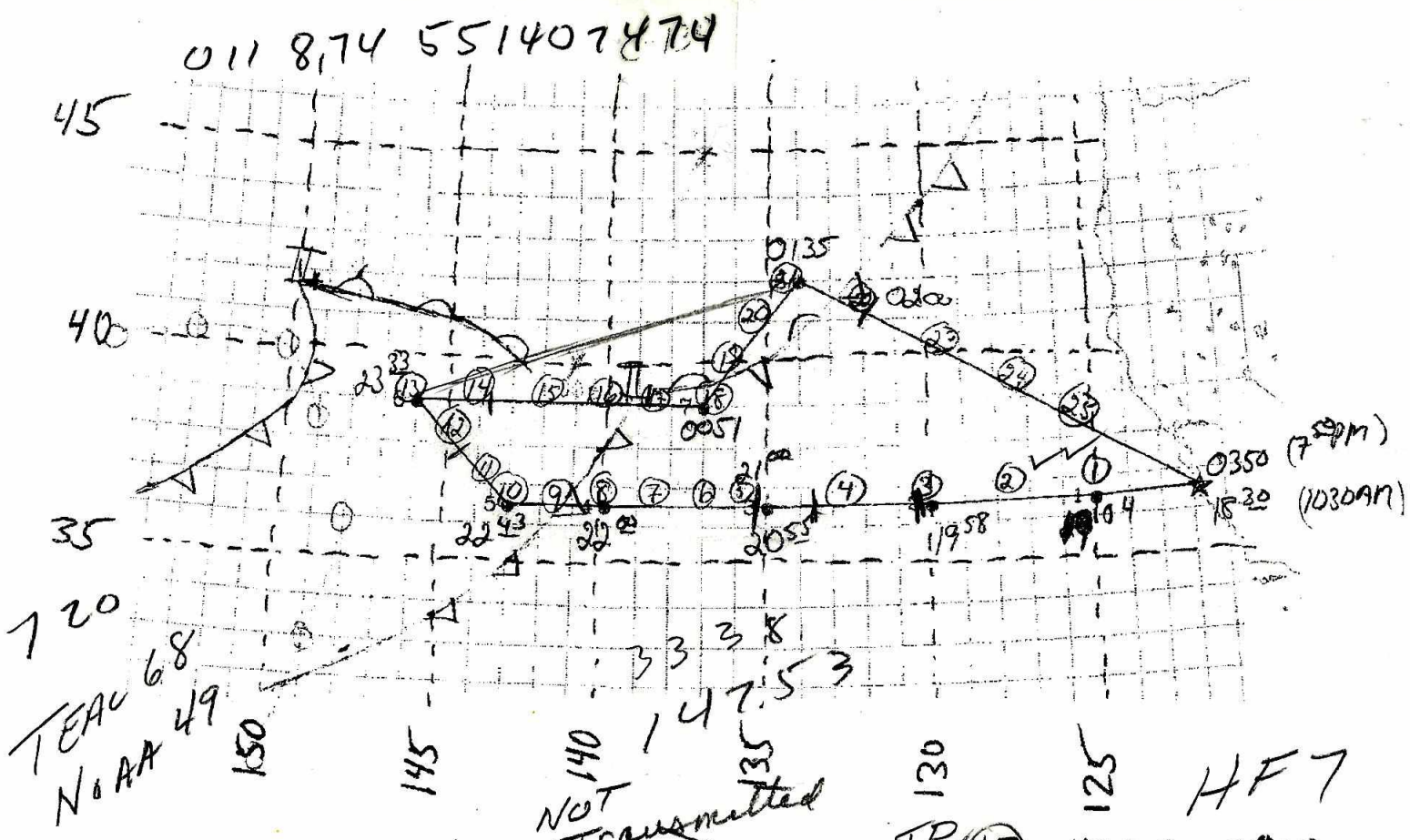
210620 - 210640, 211110 - 211240, 211440 - 211500, 211630 - 212200
215250 - 215310, 215830 - 215850, 220150 - 220420,
220610 - 220710, 220800 - 221915, 222200 - 222450,
222510 - 222610, 222640 - 222830, 222940 - 223020,
223110 - 223930, 225130 - 225320, 234810 - 235020
235920 - 000030, 000120 - 012600, 013040 - 014420

RENAV (OVER)

Proposed Super-ICP
PACJET Mission 010131I
Takeoff Time: 1830 UTC

P3 Flight Track Plan

(46.0,-119.0)



(31.0,-154.0)

- ✓ (5) 3630 13548
- ✓ (6) 3630 13806
- ✓ (7) 3630 140.48
- TP ✓ (8) 3630 14300
- ✓ (9) 3745 14430

TP ✓ (10) 3900 14600
(OPT1) (OPT2)
- ✓ (11) 3900 ~~13345~~ (14300)
- ✓ (12) 3900 ~~14130~~ (14000)
- TP ✓ (13) 3900 ~~13915~~ (13700)
- ~~(14) 3700 13700~~
- ✓ (14) 4030 13530

TP ✓ (15) 4200 13400
- ✓ (16) 4108 13206
- ✓ (17) 4017 13013

NOAA/NSSL Lambert Conformal (38.7,-137.2)

- ✓ (18) 3925 12820
- ✓ (19) 3834 12626
- ✓ (20) 3742 12433

NOAA ● AOC● SED Flight Performance Log

Aircraft : N43RF Project : PacJet '01 Mission : PACJET #4 (10P)

SED Crew: GOLDSTEIN, KOLES, BARR, ROGERS Flight ID : 010131I

Pre-Flight: 1700 Take-Off: 1841 Landing: 0320

	System			Pre-Flight	In-Flight	Post-Flight		
NAV	INE #1	Aligned to :		✓ ASG				
	INE #2	Aligned to :		✓ ASG				
	GPS			✓ ASG		Lat	Long	GS
	Diff GPS			✓ ASG				
RADAR	Nose			JMB				
	L/F	R/T SN : 103		JMB		Mod Switch Off ? ✓ ASG		
	Tail	R&T SN : 102/202		JMB		Mod Switch Off ? ✓ ASG		
	MARS Data System			Clean DAT? QR/JMB	① ③	# DATs : 3		
PMS	2DG-C	Ch 1/64: /		N1				
	2D-P Mono	Ch 1/32: /		N1				
	FSSP	Ref VDC:		NU				
	SEA Data System			Clean DAT? QR		# DATs : —		
TEMP		Cal High	Cal Low			Cal High	Cal Low	
	Temp #1	30.8	-30.5	11.0 ✓ ASG		30.8	-30.4	
	Temp #2			10.6 ✓ ASG				
	Temp #3	(Starboard)						
	Dewpoint #1	(General Eastern)		3.8 ✓ ASG				
	Dewpoint #2	(Edge Tech 137)		2.3 ✓ ASG				
	Dewpoint #3	(Buck 1011C)		-1.8 ✓ ASG				
PRESS	Attack Angle	(AP/DAP)		✓ ASG	②			
	Slip Angle	(BP/DBP)		✓ ASG	②			
	Differential	(PQ1/PQ2/PQ3/PQ4)		✓ ASG				
	Absolute	(PS1/PS2)		✓ ASG				
	Radome Transducers			Plugs ? ✓ ASG				
	Cabin Transducer	(Station 5)		✓ ASG				
FLT LVL	Apn-159	SN: 71-02		JMB		Off ? : ✓ ASG		
	Apn-232	SN: 1761		JMB		Off ? :		
	King Liquid Water			✓ ASG				
	J&W Liquid Water			✓ ASG				
	Lyman Alpha Hygrometer			Plugs ? ✓ ASG		Plugs?:		
	Down PRT-5	(SST)		✓ ASG				
	Side PRT-5	(CO^2)		✓ ASG				
	Up PRT-5			Open ? QL		Closed ? ✓ ASG		
	RAMS Data System			Clean DAT? QR		# DATs : 2		
	F/D Laptop			✓ ASG		Off ?		
	C.I. Printer			✓ ASG				
MISC	ASDL					Off ? : ✓ ASG		
	Exterior Walk Around			✓ ASG				
	Video	(N) (L) (R) (D)		ASG		Lens Covers ?: ✓ ASG		
	AXBT Receivers			NU				
	AXBT Sonobouys			#On Board : 0	# Dropped : —	# Good : —		
	AVAPS			JMB	④			
	GPS Dropsondes			#On Board : 56	# Dropped : 20	# Good : 19		
	FCU	A B C _		✓ ASG		UPS Off : ?		
USER	SatComm			MER		Accelerometers		
	NASA GORE			JMB		#1 (2 G) :		
						#2 (2.5 G) :		
						#3 (3 G) :		
						#4 (3.5 G) :		

Please Note any Discrepencies

Item #	Zulu Time	Problem Description	Initials	Status
1	2010	MARS CPU LOST POWER? 1ST POWER CYCLE NO JOY 2ND GAVE MEM ERR 3RD OK	aff	
2		CHECK NOSE FLOW & PLUMBING AA1 = 11. mb AA2 = -21 SA1 = -20. mb SA2 = -5.5 PQ4-OK	aff	small OK
3	2312	MULTIPLE RCU, DSP & DSPC ERRORS; SOFTWARE RESET SUCCESSFUL	aff	small OK
4	0155	AVAPS DATA SYS LOCK UP - PARTIAL LOSS OF ONE SONDE'S DATA - RESTART OK	aff	OK small

364.2

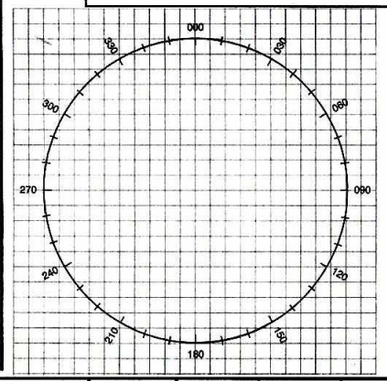
HF 131.95 VHF 11282 13280

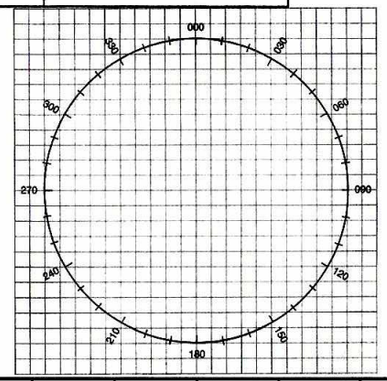
CLEARANCES

FREQ	ALT	HDG	OTHER
			MRY 8
			350° ↗7K ↗16K
			16K-240
			16-280
			↗15K ↗9
			↓8 ↘5K ↘2K

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
1823 1830	ENG TAXI																				
(1830) 1841	BLOCK T/O																				
1848	X	36 46.2 122 09.2	36 46.0 122 10.1	+.2 -.9	36 46.0 121 10.1	+.2 -.9			006	5L	001	230	030	30	16K↗	223	#1	137	+36	1924	275/87 SNS
1900		36 41.6 123 2.0	36 41.3 123 22.8	+.3 -.8	36 41.2 123 22.7	+.4 -.7			267	4L	263	300	030	25	16K	288	#1	82	+16	1916	265/81
1950		36 32.0 128 10.5	36 31.8 128 11.2	+.2 -.7	36 31.6 128 11.1	+.4 -.6			276	2L	274	285	015	15	16K	276	#2				
2039		36 32.8 132 56.4	36 32.1 132 57.3	+.7 -.9	36 31.7 132 57.4	+1.1 -1.0			266	0	266	284	260	10	180	295	#3	105	+22	2101	
2126		36 31.6 137 19.2	36 30.9 137 20.4	+.7 -1.2	36 30.6 137 19.8	+1.0 -.6			266	3R	269	261	235	30	19K	278	#4	133	+30	2156	
2230		36 30.0 142 37.9	36 28.6 142 38.6	+1.4 -.7	36 28.1 142 38.8	+1.9 -.9			269	4R	273	238	245	55	195	286	#4				
2311		38 33.6 145 22.1	38 31.6 145 22.7	-2.0 -.6	38 31.5 145 23.2	-2.1 -1.1			306	9R	315	288	254	50	195	312	#6				
2354		39 00.0 141 27.3	38 56.3 141 25.6	+3.7 -1.7	38 56.3 141 28.7	+3.7 -1.4			097	7L	090	343	245	75	220	278	#7	205	+35	0029	
0114		41 51.7 133 21.9	41 46.2 133 24.8	+5.5 -2.9	41 45.6 133 25.5	+6.1 -3.6			131	10L	121	304	235	55	230	284	TREVOR				
0238		38 00.0 125 11.9	37 55.4 125 18.3		37 53.1 125 19.7				121	0	121	335	300	20	260	311					
0321		LAND MRY																			
		36 35.2 121 50.5	36 32.0 121 58.1	+3.2 -7.6	36 28.5 122.000	+6.7 -8.5															

U91C

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

INITIAL = 292°M

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
KMRY	PACJET #4	ADLER	KENUL	SHEPHERD	1830 / 1841	31 JAN 01

18 SOB
540
321
9+01

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	END #4															1830		
2	TREVOR															27 11 / 03 11		LAND
3														#1	+37	19/8	#7	
4																		
5																		
6																		
7																		
8	SHOEY																	
9	MRY																	
														TIME	FUEL	PP	CALC WP	ETE
														1835	573	/	/	
														1900	54.3	5.3	5.0	@ 5.5 8+00 / 0200
														2100	44.3	4.8	5.0	6+50 0350
														2200	39.1	4.8	5.2	5+10 0310
														2300	34.0	4.9	5.1	4+20 0320
														0000	29.0	4.6	5.0	3+35 0335

INS PERFORMANCE

	INS 1	INS 2
BEGIN ALIGN TIME	1720	1720
ALIGN STATUS (0-5)	0	0
END NAV TIME	0321	0321
START NAV TIME	1820	1820
DELTA T	9+01	9+01

TERMINAL ERRORS

	INS 1	INS 2
DELTA LAT	-3.2	+6.7
DELTA LON	-7.6	-9.5
RGS	2	4
RADIAL ERROR	7	10.

REMARKS

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