

Florida Bay ETL Ocean Remote Sensing

Flight #3 H000523

DATA TYPE	SENSOR or OPTION
INE	1
Accelerometer	1
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2
Constants File	CO2003.CON

Notes:

There was one data/time gap: 140251Z - 140310Z

The Johnson-Williams Liquid water probe was not operating.

The King Liquid water probe was operating but could not be zeroed-out.

There were a several occurrences during the flight when the selected dewpoint sensor, DW2, produced erroneous data. This occurred during the following times:

1406Z - 1409Z
1518Z - 1522Z
1524Z - 1529Z

The erroneous data was removed and patched over.

During the period, 211727Z - 212757Z, DW1 values replaced DW2 values.

Downward spikes in radar altimeter values were due to overflying land.

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 wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1014.8 mb	1012.5 mb
Corrected tower pressure	1015.0 mb	1013.0 mb

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AOCWF1

Flt ID: 000523H	From: KMCF	To: KMCF
Flt No.: 00-51	Blk In: 2202	ATA: 2153
ETD: 1300Z	Blk Out: 1349 8:13	ATD: 1359 7:54
ETE: 2200Z	Blk Time: 8.2	Flt Time: 7.9
Sponsor Org: ETL	Program: FLORIDA BAY	Purpose: OIL SEEPAGE

AOC Personnel

AC: TENNESEN, D	Sys Eng: HORN BROOK, C
CP: KENUL, P	Data Sys: CARPENTER, D
Nav: ADLER, J. / NEWMAN, C	Radar:
FE: MOORE, B	GPS/BT:
Avionics:	Cld Phys:
FD: SHEPHERD, T. / DAMIANO, B	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
FEDORE, L	PI	ETL
FALLS, M	Co-PI	"
SOLOMON, S	PI	"
PORTMAN, B	Co-PI	"
DANIEL, J	Co-PI	"

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

HOLDING TAKE off

2525 Dpt 2 going bad

Dpt 1 - going off scale

~1530 Dpt 1 back (fuse blown); leave screen 10 on Dpt 2

2012 Reset radars

2015 TA up

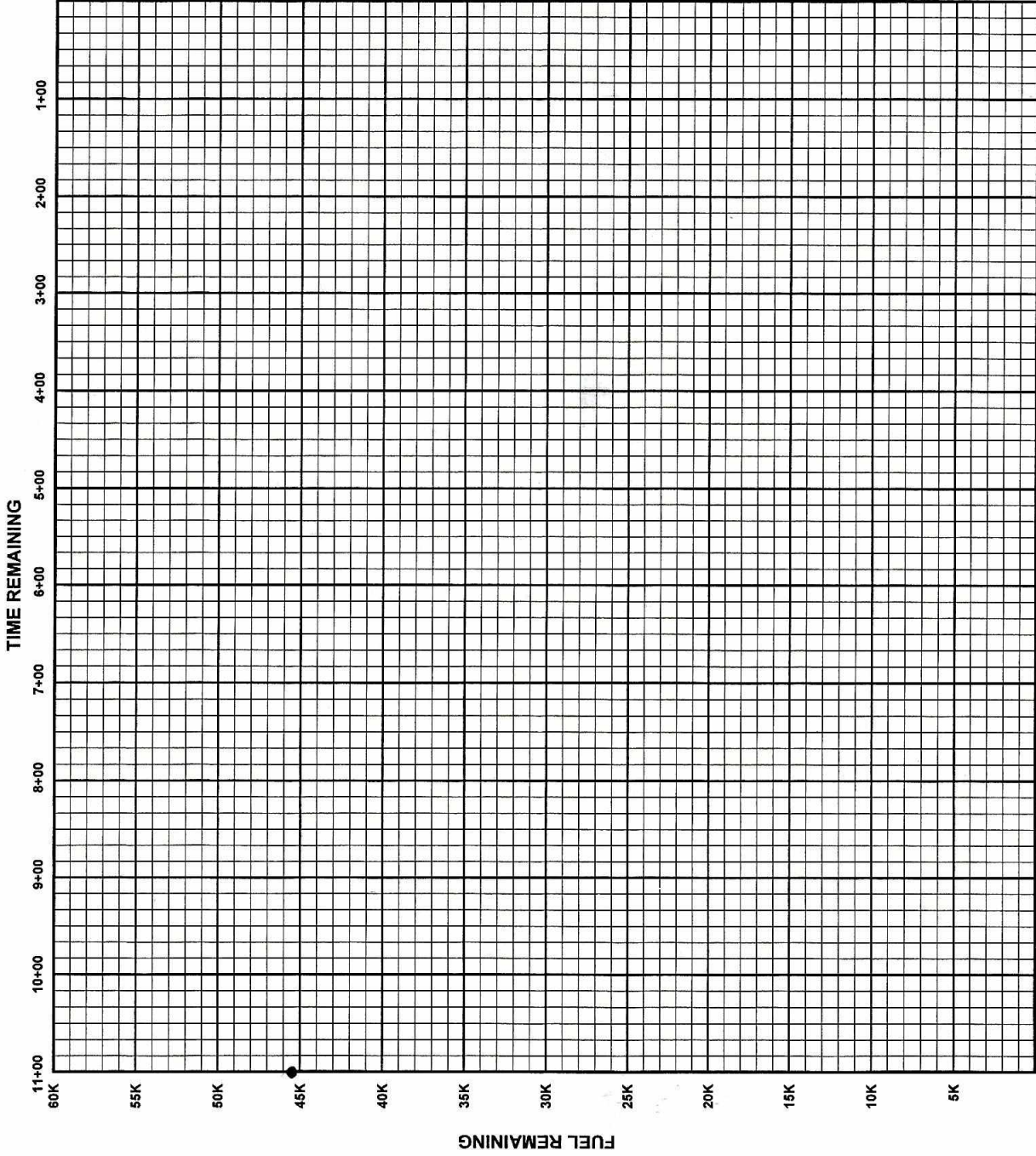
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AOCWF2

Flt ID: 000523H		Time Off: 1359		Time On: 2153	
	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)	
Pressure	1014.9	29.99	29.93	1010.7	
	Number	Data Disposition/Date/Quality			
Slow/Fast Flt Lvl Tapes					
Radar Tapes					
Cloud Physics Tapes					
Video Tapes					
AXBT					
AXCP					
AXCTD					
Dropsondes					
Video					
	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					
Remarks Took 10 min off actual block time of 1339 making it 1349 due to delay at takeoff for clearances.					

46.2 @ 1530Z
must LAND @ 2250

RANGE CONTROL GRAPH



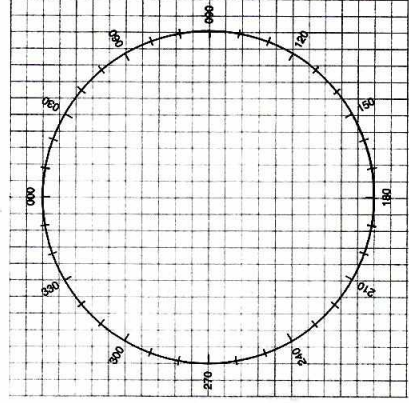
ENROUTE FUEL	
ENROUTE TIME	
ENROUTE FUEL (6K 9K 45K RULE)	
RESERVE AT DESTINATION	
REQUIRED RAMP	
ACTUAL RAMP FUEL	

TACTICAL (OFFSTA TO DESTINATION)	
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	
ETP DISTANCE (TO DEPARTURE)	
ENROUTE TIME (TO DEPARTURE)	
BURN RATE (LBS/HR)	4500 5500
FUEL REQUIRED	
RESERVE AT DEPARTURE	
PSR FUEL	

CEX - TRUE BEARING METHOD				CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET	GMT	
MCH (READING)				GHA	
- MTH (SEXTANT)				CORR	
CE				GHA	
- VAR				LONG +W -E	
DEV				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			



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

PRESS ALT		F ₁ FACTOR					
10,000	200	1.0	250	300	350		
20,000		.99	1.0	.99	.99		
30,000		.97	.98	.97	.97		
40,000		.96	.96	.95	.94		

TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	ITAS
1530	205	175	/	/	+3	273

DISTANCE REMAINING

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

FUEL 73NF 0022 05442200