

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

Flt ID: 040906I	From: KNEW	To: KOPF
Flt. No: 04-59	Blk In: 1717 Z	Time On: 1707Z
ETD: 1500Z	Blk Out: 1445 Z	Time Off: 1453Z
ETE: +	Blk Time: 2+32 2.5 Hrs	Flt Time: 2+14 2.2 Hrs
Sponsoring Org: NOAA/NHC	Program: Hurr 2004	Purpose: REPO St. Croix

AOC Flight Crew

Aircraft Commander: TEBEEST, R	Data System: LYNCH, T
Co-Pilot: SILAH, M CHOY, B	AVAPS: TONG, R
Navigator: SIEGEL, P ADLER, J	System Eng: SMITH, J
Flight Eng: FLOYD, D KLIPPEL, J	A A:
Flight Director: SHEPHERD, T	A A:
Avionics:	Crew Chief: MITCHELL, R

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Dodge, P	PI	NOAA/HRD
Black, M	PI	1

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	<u>Recco Times</u>	<u>Fix #</u> <u>Fix Time</u>
<u>Storm Name:</u> _____		
<u>Mission ID:</u> _____		
<u>Penetration number and time</u>		

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Flight ID: <i>040906I</i>		Time Off: <i>1453 Z</i>		Time On: <i>1707 Z</i>	
A/C - Takeoff		Wx Station - Takeoff		A/C - Land	
Pressure					
<i>1008.5 mb</i>		<i>29.80 mb</i>		<i>1010.5 mb</i>	
<i>29.86 mb</i>					
ATIS	Time	Observation			
Takeoff	<i>Z</i>				
Land	<i>Z</i>				
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes					
Dropsondes		Good: Bad:			
AXBT					
AXCP					
AXCTD					

Remarks:

1 NE I - Alt. tude only today

- Data tapes started ~ 1446

- Laptop shut down @ T.O. - got hot; changed battery

2554

8017

1744

6442 TISX

KOPF 1453Z 18018G24 10SM SCT032 BKN 039

MET A 2985 PK WIND 18026/1429

TISX TEMP 1620 - SHRA SCT020 BKN040

FM 2300 19010 68m FEW 025

1750 19017G24 2200

Mission Repo Ferry - OPA → TISX Flt ID 040906 ISED Crew Lynch, Tony, SmithPre-Flight 13:30 Take-Off 14:52 / 18:26 Landing 17:06 / 21:55

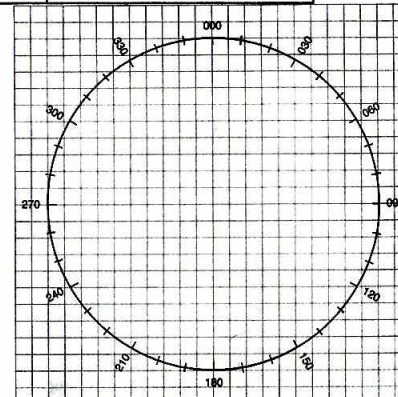
System				Pre-Flight	In-Flight	Post-Flight			
NAV	GPS	FM: 1		TL					
	INE #1	Time On: 13:30	Aligned to: 1	TL					
	INE #2	Time On: 13:30	Aligned to: 0	TL					
	Diff GPS			TL					
RADAR	MARS Data	Start	Stop	Ready?	HRD?			# DATs ?	Given To: →
	MARS			TL	Y / N				
	MARS Data / Tape Status				LFRec	TARec	EOF's		
	MARS LU8	Clean		NY					
	MARS LU9	Clean		NY					
	RADAR R/T SN	Tail 202/102	LF 102	TL	Mod Switches	ON		Mod Switches	OFF
PMS	Nose			TL				Power	OFF
	FSSP Ref VDC:	Covers	OFF	NY				Covers	ON
	Cloud Mono	Covers	OFF					Covers	ON
	CIP	Covers	OFF					Covers	ON
PMS	SEA Data DAT	Start	Stop	Ready?	#DATS	Errors	Disk Write	Given To:	
	DAT	Clean?					Y / N		
TEMP		Cal High	Cal Low					Cal High	Cal Low
	Temp #1	430.6	-30.5	TL				30.7	-30.2
	Temp #2			TL				Power	OFF
	Temp #3			TL				Power	OFF
PRES	Dewpoint	#1 #2 #3 (TDL)		TL				Power	OFF
	Attack / Slip Angle	AP BP DBP		TL				Power	OFF
	Differential	PO1 PO2 PO3 PO4		TL				Power	OFF
	Absolute	PS1 PS2 QPS		TL				Power	OFF
FLTLVL	Apn-159 SN:	66-024		TL				Power	OFF
	Apn-232 SN:	1761		TL				Power	OFF
	Liquid Water	J&W King		RT	28V WOW: ON?			Power	OFF
	Radiometer	CO2 SST		TL	28V WOW: ON?			Power	OFF
RAMS	RAMS Data	Start	Stop	Ready?	Errors 8:	Errors 9:		# DATs ?	Given To: 84
	CPU: A	B	14:45	21:53	Y	1	0	Power	OFF
	RAMS Data / Tape Status				Slow Rec	Fast Rec		Disk Records:	2594
	RAMS LU8	Clean		TL	2594	2594/			
	RAMS LU9	Clean		TL	2594	2594/			
	Flight Director Laptop			TL				Power	OFF
	Network			NY					
	ASDL Mission #:	Name:		NY	Freq:	Block:		Power	OFF
MISC	C.I. Printer	Start	Stop	Ready?	Paper Bin Stores			Given To:	Step
	PRATE:	60	14:46	21:53	TL	0% 25% 50% 75% 100%		Power	OFF
	Exterior Walk Around	Plugs	Covers	RT				Plugs	Covers
	SATCOM	W/S Inmarsat	GlobalStar	JS				Power	OFF
MISC	AXBT Internal	# Loaded:	0	NY				# Launched:	0
	AXBT External	# Loaded:	0	NY	28V WOW			# Launched:	0
	AVAPS	# On Board:	4 36	JAS				# Dropped:	0
	Video Cameras	Start	Stop	Ready?	Cameras	Mode		# Tapes ?	Given To:
	VHS SVHS			NY	(N) (L) (R) (D)	2 / 12		Lens Cap ?	✓
	FCU							UPS	OFF
USER	SFMR	HRD AOC		TL				Accelerometers	
	NASA SRA			NY				#1 (2 G):	8203
	ARL BAT Probe, SST & IRGA							#2 (2.5 G):	16687
	UW PDA							#3 (3 G):	5967
	Scripps MASS, Laser Alt, IR Cam & Sono							#4 (3.5 G):	2892
	RSMAS Licor			TL					

19.

[illegible]

200 --- (--- --- ---)

MISSION LOG	PAGE ____ OF ____
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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 43
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

MISSION PREFLIGHT LOG							NAVIGATOR		AIRCRAFT COMMANDER			FLIGHT DIRECTOR		SCHEDULED / ACTUAL TAKEOFF Z		DATE OF TAKEOFF		
DESTINATION		MISSION																
OFF		Rego - OPF / TISK					Adlar		Teblest			Shepherd		1502 / 1452		1830 / 1827		
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
NEW	1	N30 02.6 W90 01.7																
CIGAR		27 29.6 84 47.0		118														
OPF	5	25 54.4 80 16.7																
EDSON	11	26 01.8 81 27.5																
CUBIC	5	38 30.0 120 05.0																
MM																		
OPF		25 54.4 80 16.7																
VEZ		25 45.1 80 09.3		150														
STANAN	5	25 32.0 79 02.3		110														
RAJAN	4	25 18.1 78 11.2		111														
ZQA		25 02.4 77 28.2		118														
ZLS	6	23 34.8 75 18.8		133														
INDEE	7	23 08.4 74 23.4		127														
GTK	8	21 26.4 71 08.1		127														
GRADY	9	20 31.1 69 37.9																
HARDY	1	20 00.4 68 49.0																
IDAH	2	19 15.6 67 38.4																
BQN	3	18 29.9 67 06.5																
TUUNA	4	17 58.9 65 53.2																
COY	5	17 44.1 64 42.0																

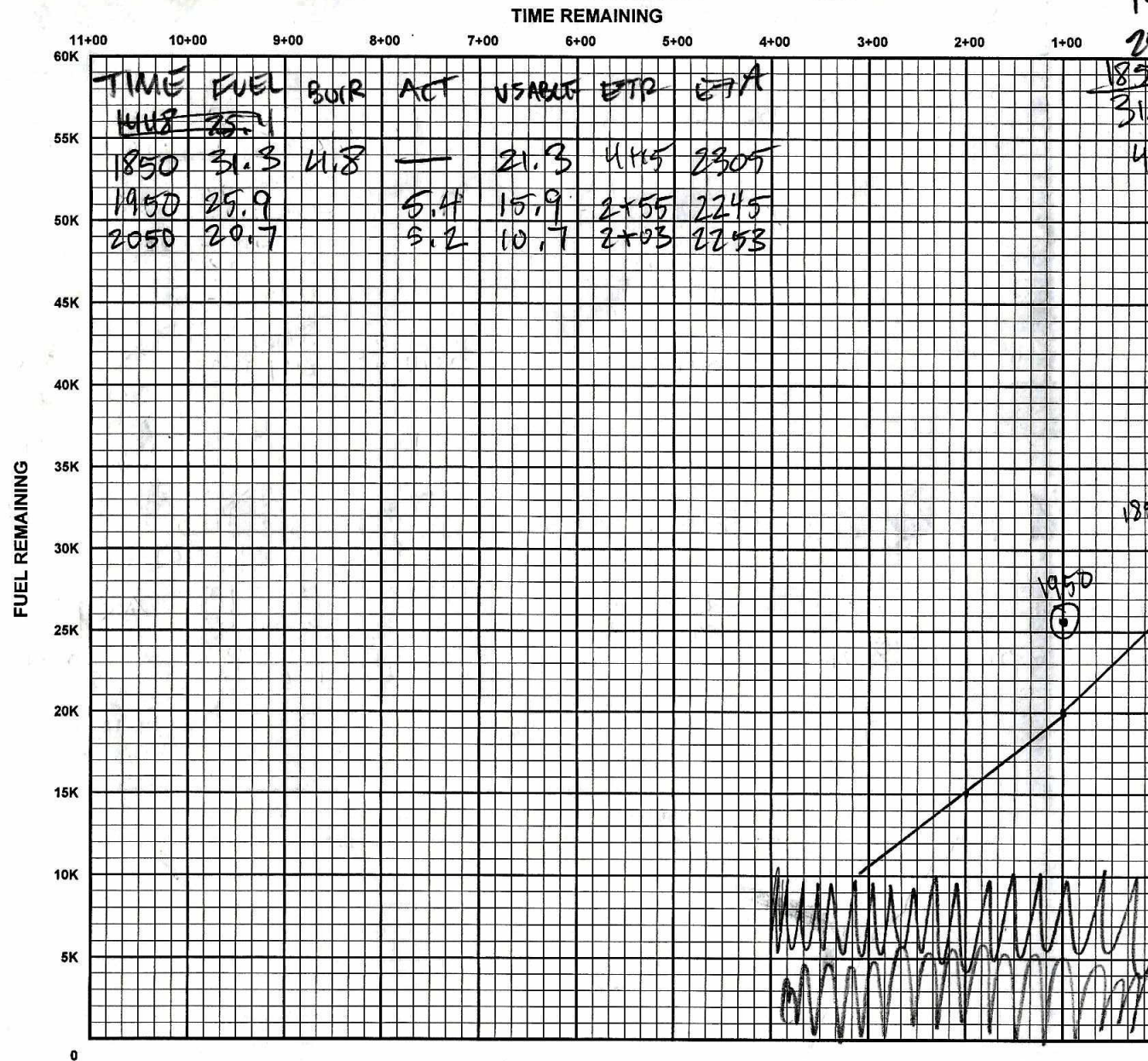
14508
16508

INS PERFORMANCE		
	INS 1	INS 2
BEGIN ALIGN TIME	1330 / 1720	1330 / 1720
ALIGN STATUS (0-5)	4 / 1	0 / 1
END NAV TIME	1720 / 2155	1720 / 2155
START NAV TIME	1438 / 1807	1438 / 1807
DELTA T	2+08	2+08

TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	+3.9	-5.9
DELTA LON	-0.7	+3.9
RGS	4	1
RADIAL ERROR	4	7

REMARKS

RANGE CONTROL GRAPH



DISTANCE REMAINING

$$ETP = .5(TOTAL\ DISTANCE \times OUTBOUND\ WIND\ FACTOR)$$

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	2+00
ENROUTE FUEL (6K 5K 4 5K RULE)	11K
RESERVE AT DESTINATION	10K
REQUIRED RAMP	21K
ACTUAL RAMP FUEL	25.4

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

TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS

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

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

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

