

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

AOCWF1

Flt ID: I031206	From: KMCF	To: KMCF
Flt No: 04-08	Blk In: 2328Z	ATA: 2319Z
ETD: 1500Z	Blk Out: 1516Z	ATD: 1529Z
ETE:	Blk Time: 8:12 (8.2)	Flt Time: 7:50 (7.8)
Sponsor Org: HAD	Program: EXTROPICAL	Purpose: TS ODETTE

AOC Personnel

AC: KENNEDY	Sys Eng: SMITH
CP: SILAH	Data Sys: LYNCH
Nav: BRAKOB	Radar:
FE: WADE	GPS/BT: TONG
FD: DAMIANO	Cld Phys:
Avionics: SANS SOUCI	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
DODGE	PI	HAD
DORST	HAPS	↓
CIONE	ASST. PI	
EASTEN	RADAR	
POPSTEFANO	SFMR	QUADRANT

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

09Z 16.5 72.2 030/12 55KTS 1620Z 16m/14 AF 1701Z AF 1419Z 1228Z
 18Z 18.2 71.3 1700Z 16°05' 16°34' 16°34'
 06Z 26.7 69.3 30KTS 72°03' 72°06' 72°12'
 994 995 700MB
 995

SK F Pump Lite
 Prop Problem on #12
 delay T/O

NAC
 153 17.2
 71.9
 002 19.0
 71.0

73° 17.5'N 71°W
 15.5N STRG CONV

SFC CNTR
 150/9 FROM
 FL CNTR

09 1355Z
05

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AOCWF2

Flt ID: **I031206** Time Off: **1529Z** Time On: **2319Z**

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1019.0	30.10	1018.6	30.10 30.10

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes	3	
AXBT	10	6 science ; 4 disposed
AXCP		
AXCTD		
Dropsondes	16	15 good ; 1 no wind

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

Remarks

KMCF
BCLC 0102Z 02009KT SKC

KTPA
FM 2100 35012KT 6SM SCT 110



NOAA P-3 N43RF
EXTRATROPICAL - T.S. ODETTE
MISSION 2



Flight ID: 031206I

Sensor or system

Number or Name

INE

2

Accelerometer

2

Temperature Probe

1

Dew Point Probe

2 (Edge Tech)

Altitude (for vertical wind)

Radar Altimeter 159

Static Pressure

Rosemount Fuselage

Dynamic Pressure

Rosemount Fuselage 1281

Time Source

Micro 99

Constants File

CO3034.CON

Notes:

There were many time/data gaps during this flight. The following is a list of these gaps:

181331Z-181340Z, 181342Z-181400Z, 181442Z-181510Z, 192702Z-192710Z, 192802Z-192810Z, 192941Z-193000Z, 201232Z-201240Z, 201532Z-201540Z, 201642Z-201700Z, 201732Z-201740Z, 201742Z-201750Z, 201802Z-201810Z, and 201812Z-2101820Z.

From 152601Z-152900Z and from 231830Z-231900Z, Radar Altimeter 232 was used in place of Radar Altimeter 159.

Dewpoint spikes were removed between 162601Z-163200Z, 173401Z-173600Z, 182731Z-182900Z, 201901Z-202400Z, 202501Z-202730Z, 204501Z-204550Z, and 230701Z-232200Z.

There was one time during the flight where the dewpoint temperature exceeded ambient temperature resulting in an RH>100%. This was likely due to heavy rain, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. A correction was made to the dewpoint measurements during the times between 193041Z-193230Z to lower the relative humidity values during this period.

Between 180100Z-180400Z and between 210300Z and 211200Z, several spikes in the radar altimeter data and all parameters derived from the radar altimeter can be expected as a result of flying over the mountainous terrain of Cuba and Haiti.

Otherwise, all instruments performed optimally during the flight.

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	1019.0 mb	1018.6 mb
Corrected Tower Pressure	1019.3 mb	1019.3 mb
Flight Director:	Martin Mayeaux	(813) 828-3310 ext. 3086

Flight ID: J031206

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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
155300	2659	8100	131	141	242	45	-6.8	-30.1	5190	5363	—	526.6	75.4	ABV SC CLD
161800	2541	7916	131	139	239	33	-5.3	-37.2	5181	5384	—	527.3	74.3	ABV SC CLD
164700	2409	7723	132	138	241	25	-2.9	-43.7	5177	5402	—	527.6	73.5	ABV CLD
165800	2335	7641	134	141	239	28	-5.4	-45.5	5130	6108	—	482.9	65.1	ABV SC
170831	2300	7600	132	138	245	20	-6.1	-44.7	5128	6105	—	483.0	71.7	DROP (32)
173000	2150	7439	133	137	247	14	-5.6	-29.9	5128	6111	—	483.2	73.0	ABV CU
174253	2100	7400	153	150	231	8	-4.3	-43.5	5174	5949	—	493.2	74.2	DROP (42)
181009	1914	7342	206	210	298	14	-5.2	-38.2	5175	5951	—	492.9	73.7	DROP (43)
183900	1740	7344	126	127	315	14	-4.2	-23.7	5173	5948	—	493.4	78.1	OVCST CLR
184306	1728	7326	126	127	305	16	-4.1	-23.0	5171	5949	—	493.4	74.9	DROP (6)
185239	1659	7244	126	127	311	25	-5.0	-10.2	5173	5943	—	493.3	73.1	BT ¹⁶ DROP (22)
190200	1621	7211	142	147	270	28	-4.8	-20.7	5173	5949	—	493.3	79.6	BTN CLD
190019	1600	7154	46	45	253	22	-4.8	-22.5	5173	5952	—	493.3	69.0	DROP (22)
192243	1645	7107	46	48	219	42	-5.3	-15.3	5171	5938	—	493.5	69.0	DROP NO WND
192417	1651	7101	45	47	213	43	-5.2	-20.8	5172	5942	—	493.3	70.3	DROP (20)
193604	1733	7024	760	253	183	41	-6.4	-6.0	5172	5943	—	493.2	77.0	DROP (19)
193748	1732	7031	259	252	197	52	-6.4	-6.0	5184	5938	—	493.5	82.6	DROP END (16)
194735	1730	7117	269	265	222		-4.3	-4.3	5176	5917	—	493.1	71.7	BT ¹⁶ SONDE
194819														BT ¹⁶
195000	1736	7130												BT ¹⁶
195345	1730	7146	220	271	343	2	-2.9	-3.7						BT ¹² NO WND SONDE
195508	1730	7151			335	28								DROP (19)
200249	1730	7230	270	271	323	18	-3.9	-8.5						BT ¹⁶
200817	1745	7250	310	312	331	16	-4.5	-14.7						BT ¹² (21) SONDE
201347	1800	7312	320	1	320	16	-3.8	-23.9						BT ¹⁶
203100	1810	7420	313	314	291	10	-5.4	-37.1	5178	5949	—	493.2	76.4	CLR ABV SET CU
203720	1829	7443	311	311	275	12	-5.9	-34.1	5176	5949	—	493.0	72.6	DROP (16)
205000	1902	7529	326	325	246	12	-6.4	-44.1	6119	6421	—	464.1	74.2	CLR
205703	1930	7549	326	325	243	14	-7.2	-43.7	6121	6424	—	464.1	72.5	DROP (19)
215100	2310	7826	326	319	244	38	-9.2	-33.6	6119	6399	—	464.0	79.8	CLR
225400	2703	8142	317	310	277	60	-6.0	-50.7	—	—	—	544.1	82.7	CLR

=====

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: ODETTE/SYNOPTIC

NOAA/Hurricane Research Division Friday, December 5, 2003 10:05:20 pm

Aircraft: N43RF

Proposed takeoff: 06/1500Z

=====

TRACK DISTANCES

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	MACDILL			0.	0.	0:00
1	23 00	76 00		472.	472.	1:58
2	21 00	74 00		167.	639.	2:39
3	17 29	73 26	90/269	214.	853.	3:33
4	16 00	71 54	90/180	126.	979.	4:04
5	17 30	70 22	90/90	127.	1106.	4:36
6	17 30	71 54	0/ 0	90.	1196.	4:59
7	17 29	73 26	90/269	90.	1286.	5:21
8	19 30	76 00		193.	1479.	6:09
9	MACDILL			625.	2105.	8:46

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: ODETTE/SYNOPTIC

NOAA/Hurricane Research Division Friday, December 5, 2003 10:05:20 pm
Aircraft: N43RF Proposed takeoff: 06/1500Z

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	23 00	76 00		1:58
2	21 00	74 00		2:39
3	19 14	73 43		3:06
4	17 28	73 28		3:33
5	16 44	72 46		3:48
6	16 00	71 54		4:04
7	16 45	71 07		4:20
8	17 30	70 21		4:36
9	17 30	71 54		4:59
10	17 30	73 28		5:21
11	18 29	74 43		5:45
12	19 30	76 00		6:09

17018

1655

7203

99H

MAX 58 KT NE QWAD

BT SONDE

6:15 pm

1520m

BT DROPS

16 BT ① ~~18° 00' 75° 12'~~ 16

12 BT ③ ~~17° 45' 72° 50'~~ 12 BT + SONDE

16 BT ② ~~17° 30' 72° 30'~~ 16

BT ④ ~~16° 59' 72° 45'~~

BT sonde combo

15° ③ BT ch. 16

③

③ 35 23

1930

7552

1730

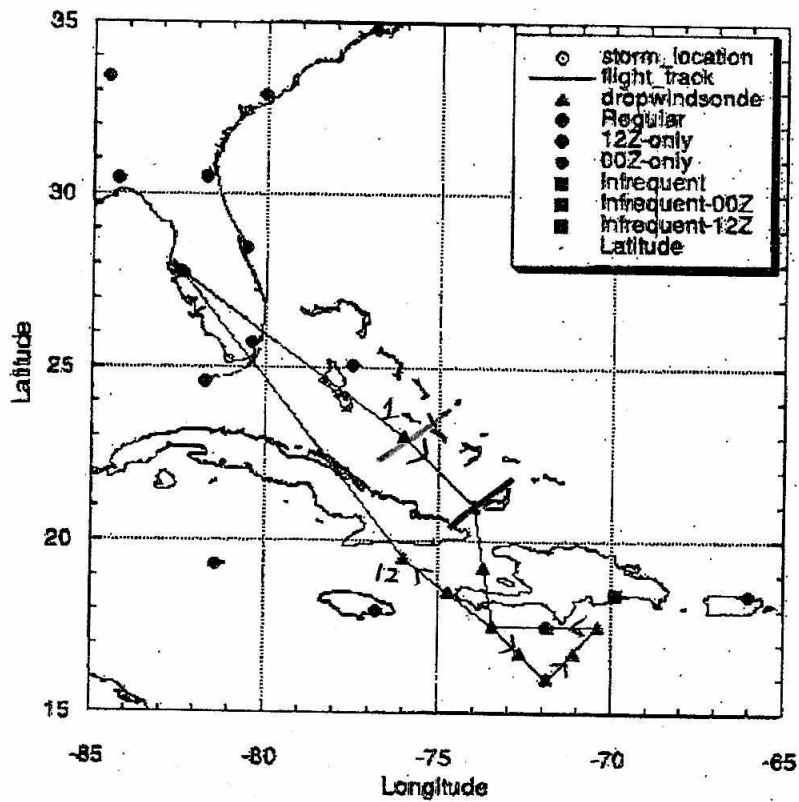
7151

17.3
71.8

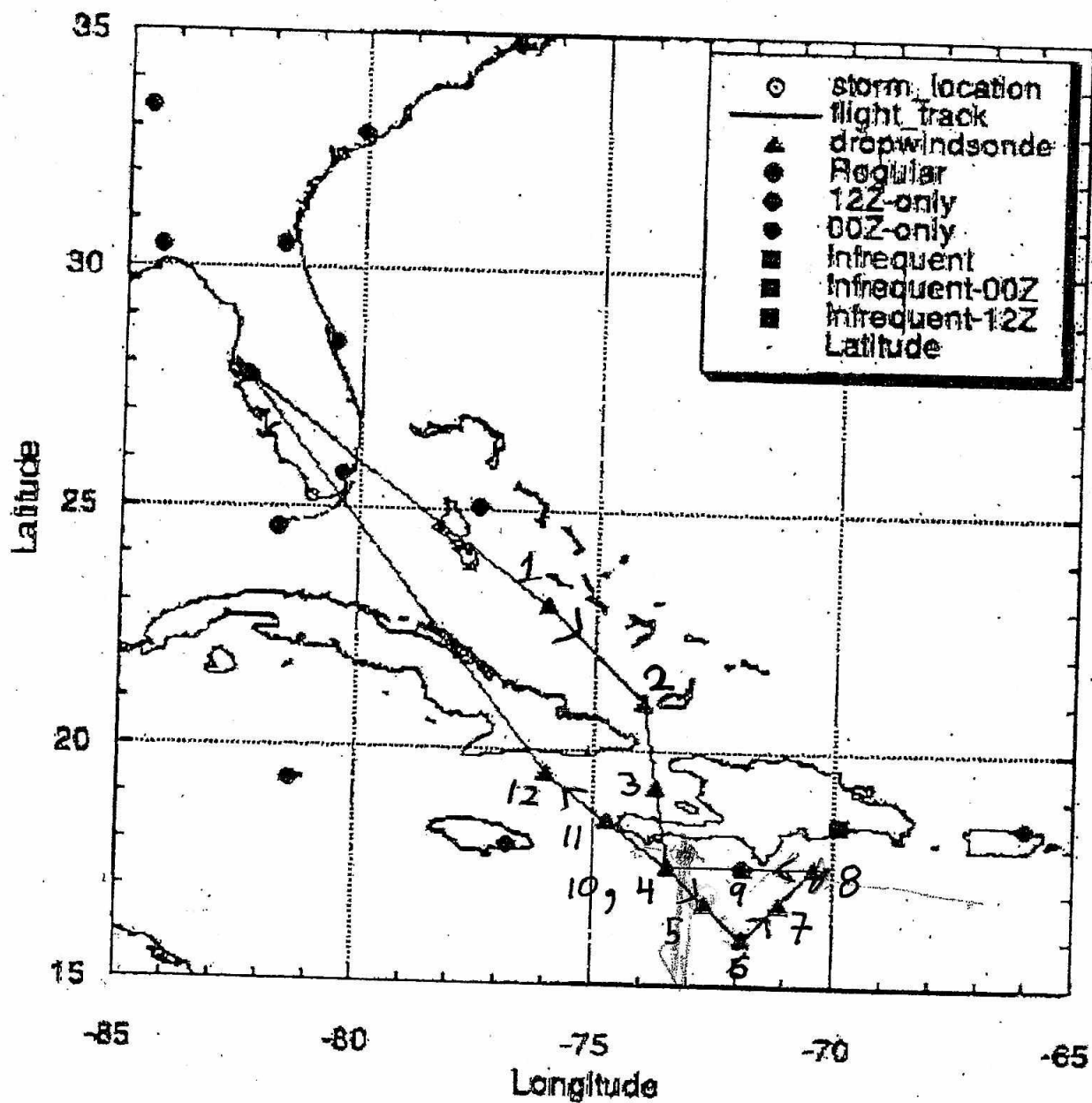
2055Z 30011617 75m FEW030 12/5
KMLF 172 35010615 FEW030 FEW250
BML 62010KT FEW030

KTPA 1730Z 35012620KT P6SM FEW030
BELM 2223 36009KT P6SM SKC
2053Z 33012620KT 10SM SCT030 12/5

03120612 ODETTE



03120612 ODETTE



NOAA • AOC • SED

N43RF AXBT DROP LOG

Project : Hurr '03 / CBLAST

Mission :

T. S. Odette 2

Flight ID : 031206i

Operators : R.T.

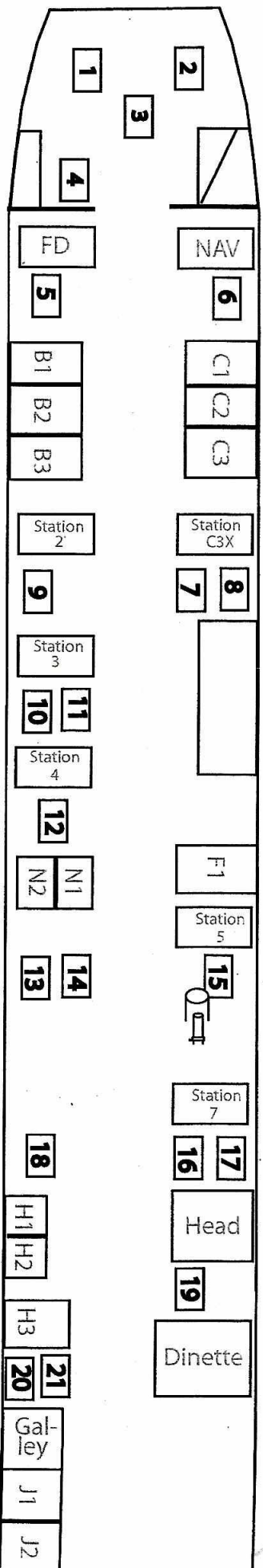
Take Off :

Landing :

[illegible]

NOAA AIRCRAFT OPERATIONS CENTER

Flight ID I 031206



1. KENNEDY PILOT
2. STLAH COPILOT
3. WADE FLIGHT ENGINEER
4. DODGE STATION 1
5. DAMIANO FLIGHT DIRECTOR
6. BEARCOB NAVIGATOR
7. ~~POPSITF ANTON~~ SMITH STATION C3X
8. CLONE STATION C3X
9. ~~POPSITF ANTON~~ STATION 2
10. ERASTEN STATION 3
11. DOEST STATION 3
12. LYNCH STATION 4
13. PROJECT SEAT
14. PROJECT SEAT
15. TOLC STATION 5
16. STATION 7
17. STATION 7
18. STANS SOWCE STATION 8
19. DINETTE
20. GALLEY
21. GALLEY

"S": 1353z 34017 3009 V157

CLEARANCES			
FREQ	ALT	HDG	OTHER
123.77			50 0004

MISSION LOG

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:

UNF/VOICE 243.0

VHF/VOICE 121.5

MF/VOICE 2182 KHZ

HF/VOICE 8364 KHZ

500 KHZ

MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA

NOAA

NOAA

43

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 14 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
1512	ENG	N	N		N																
1516	TAXI	W	W		W																
1516	ENG																				
1528	TAXI																				
1535	XV	27-48.5 82-05.0	27-48.3 82-04.8	+1.2 +1.2	27-48.3 82-05.0	+1.5 0			144	6L	138	244	260	35	8.5K	230					095/83 MCF
1600	A	25-39.4 79-13.6	25-39.3 79-13.6	-1.2 0	25-39.3 79-13.6	-1.1 0			139	8L	131	290	240	40	17K	274					
1720	A	22-21.5 75-15.5	22-21.6 75-15.5	-1.1 0	22-20.9 75-15.3	+1.6 +1.2			140	6L	134	286	235	30	19K	279					NYK 1830
1730	HF	NEW	YORK		11330		8846														NYK 1930
1820	A	18-45.2 74-20.8	18-45.7 74-20.5	-1.5 -1.5	18-45.0 74-20.3	+1.2 -1.3			235	3L	232	284	315	10	18.5	283					2030
1920	A	16-28.0 71-24.6	16-28.4 71-24.7	-1.4 -1.4	16-28.8 71-24.6	+1.2 0			045	0	045	310	225	35	18.5	273					2045
2020	A	17-50.1 73-36.4	17-48.9 73-36.6	+1.2 -1.2	17-48.2 73-36.6	+1.9 -1.2			245	5L	240	283	330	20	18.5	280					
2120	A	20-54.5 76-55.2	20-54.6 76-55.9	-1.1 -1.1	20-54.0 76-55.3	+1.5 -1.1			324	2R	326	288	245	10	200	287					
2220	A	24-58.9 79-53.9	24-58.9 79-55.0	0 -1.1	24-58.2 79-54.9	+1.7 -1.0			316	8K	324	285	255	45	200	304					
2319	LMD	27-51.6 82-30.7	27-50.0 82-31.6	+1.8 -1.8	27-50.6 82-32.0	+1.0 -1.3															

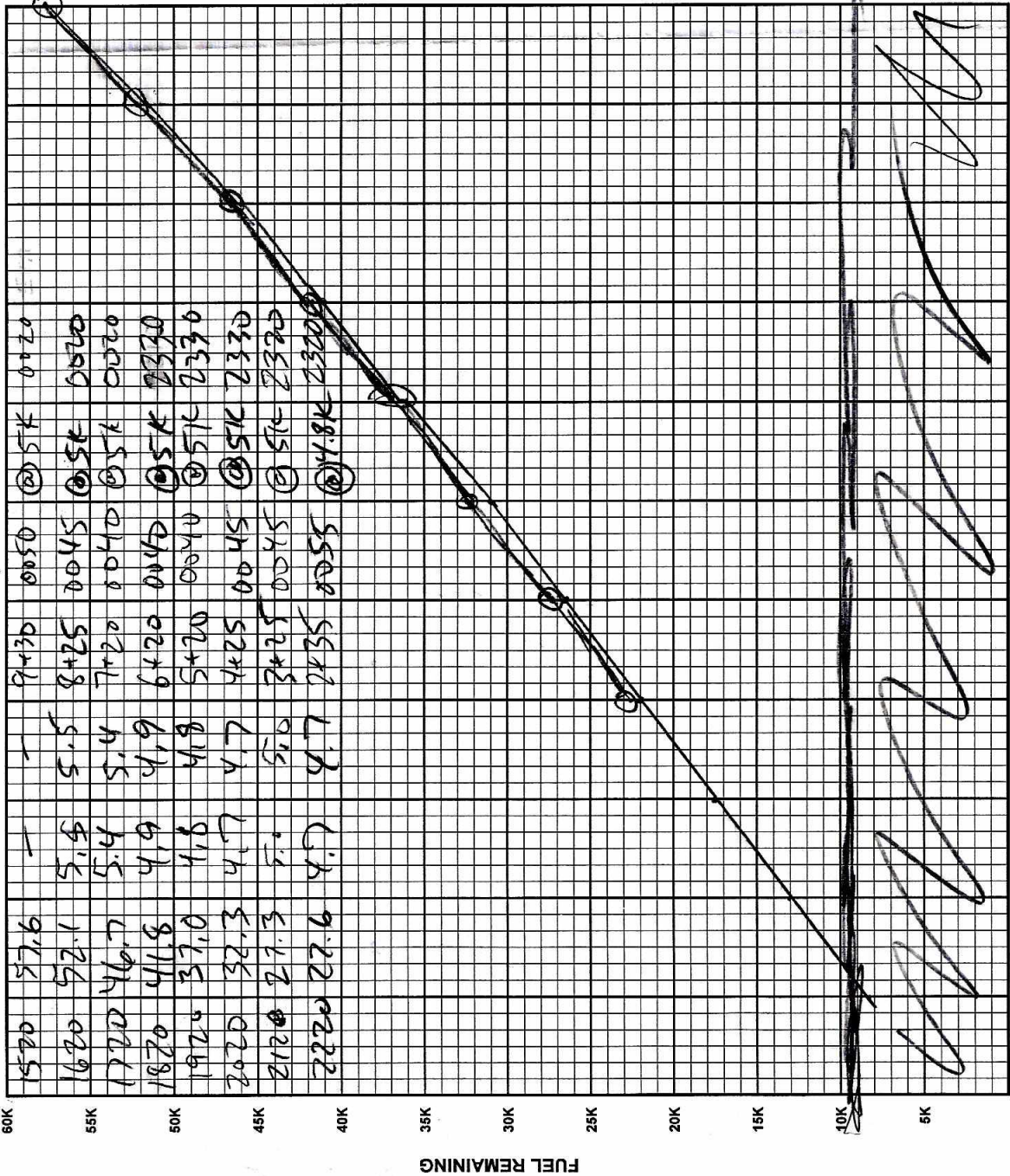
210

2043

11
72
23

1520 1620 1720 1820 1920 2020 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000

RANGE CONTROL GRAPH



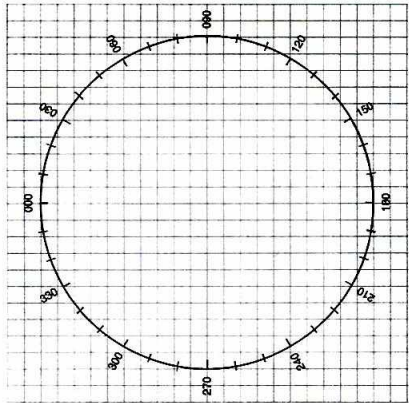
ENROUTE FUEL	
ENROUTE TIME	9400
ENROUTE FUEL (6K/5K/4.5K/RULE)	43K
RESERVE AT DESTINATION	10K
REQUIRED RAMP	53K
ACTUAL RAMP FUEL	57.6K

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			

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

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



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

TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	ITAS
1615	210	1716	X	X	+2	276
						272

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

[illegible]

(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

FIX TYPES
(G) - GPS (I) - INS (R) - RADIO (V) - VISUAL (C) - CELESTIAL (D) - DR

[illegible]