



NOAA P-3 N42RF  
IFEX/Hurricane 2005  
KNIP - KNIP



**Flight ID: H050710**

<u>Sensor or system</u>	<u>Number or Name</u>
Inertial + Accelerometer Data	2
Temperature Probe	1
Dew Point Probe	1
Altitude (for vertical wind)	Radar Altitude 159
Static and Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2054.CON

**Notes:**

There were time/data gaps from 185901-185920Z and 224111-224130Z. Be aware of data spikes as a result of these data gaps.

RA-232 was substituted for RA-159 during the following times: 185001-185447Z (take off), and 021359-021800Z (landing) due to spiking in RA-159.

There were several instances when the dew point temperature exceeded the ambient temperature resulting in a RH% above 100%. These times were during heavy precipitation events and were likely due to a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dew point sensor as it tried to burn off excess moisture. No corrections were made during these events.

There were no working Liquid Water Sensors for this flight. All other instruments worked optimally during the flight. The aircraft INE positions were renavigated with respect to GPS.

*Due to AOC equipment/printer failure, the last step of our Quality Control process (visual QC) was not able to be performed. While other measures were taken to ensure there were no problems with the data, questions concerning questionable data should be brought to the attention of the Flight Director ASAP.*

**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.

	Take-off	Landing
Aircraft pressure	1013.6 mb	1013.9 mb (PSM2)
Station pressure	1013.1 mb	1012.0mb

Flight Director: Contact Paul Flaherty  
Phone #: (813) 828-3310 ext. 3094

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

AOCWF1

Flt ID: 050710 H	From: KNIP	To: KNIP
Flt No: 05-033	Blk In: 0222	ATA: 0215z
ETD: 19z	Blk Out: 1842z	ATD: 1853z
ETE: 7+00	Blk Time: 7+40 (7.7)	Flt Time: 7+22 (7.4)
Sponsor Org: NOAA - H2D	Program: POST LANDFALL RESEARCH	Purpose: HURR DENNIS LANDFALL

## AOC Personnel

AC: KENNEDY	Sys Eng: McMURRY
CP: CHOI / SILAH	Data Sys: Hill
Nav: GALLAGHER	Radar:
FE: WADE	GPS/BT:
FD: FLAHERTY	Cld Phys:
Avionics: ROGERS	

## Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
DODGE, P	PI	(H2D)
LEIGHTON, P	RAVAD	"
ROGERS, R	SFMR	"
Murino, S	RAVAD	"

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

NOAA2 WX04A DENNIS

NO RECCOS (J. PAUDNE)

3130  
8803

KHRT

4 (4)  
PEANES  
2055z  
2216z  
2318z  
0030z



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

AOCWFF

Flt ID: 0507104

Time Off: 1853 z

Time On: 0215 z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1013.6

1013.1

1013.9 \*

1012.0

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

2

Radar Tapes

1

Cloud Physics Tapes

Video Tapes

4

AXBT

AXCP

AXCTD

Dropsondes

17

17 RD  
17

5 BAD

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

T/O A2997  
1655z 15017KT 3SM -RAER 29/26

LAND 0055z ~~2800517 20SM 24/15 A2998~~

14019 626KT 6SM HZ 29/24 A2994

Screen 0 was out, 152M shown above for landing pressures

Flight ID : 05071014

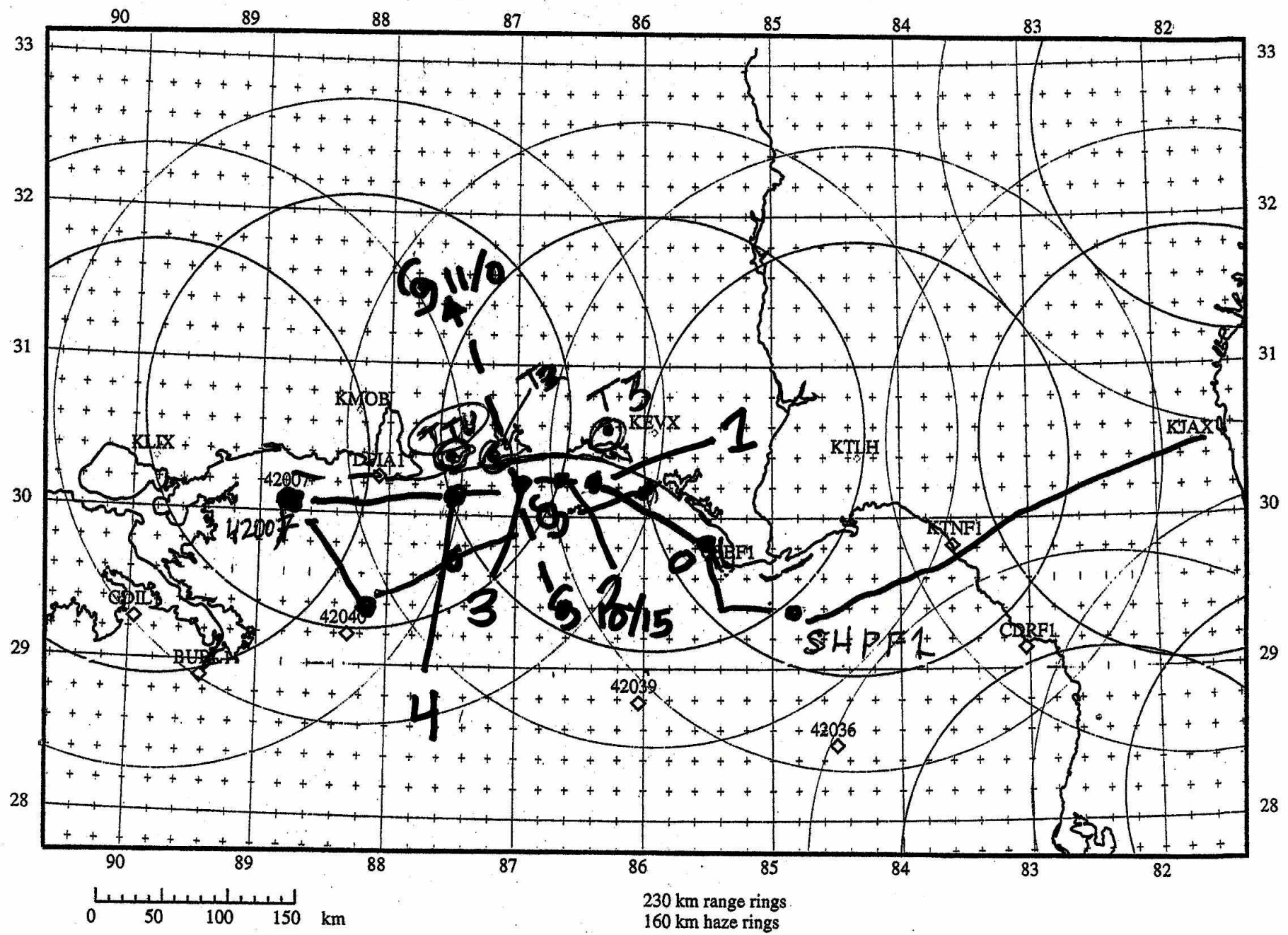
**Landing :**

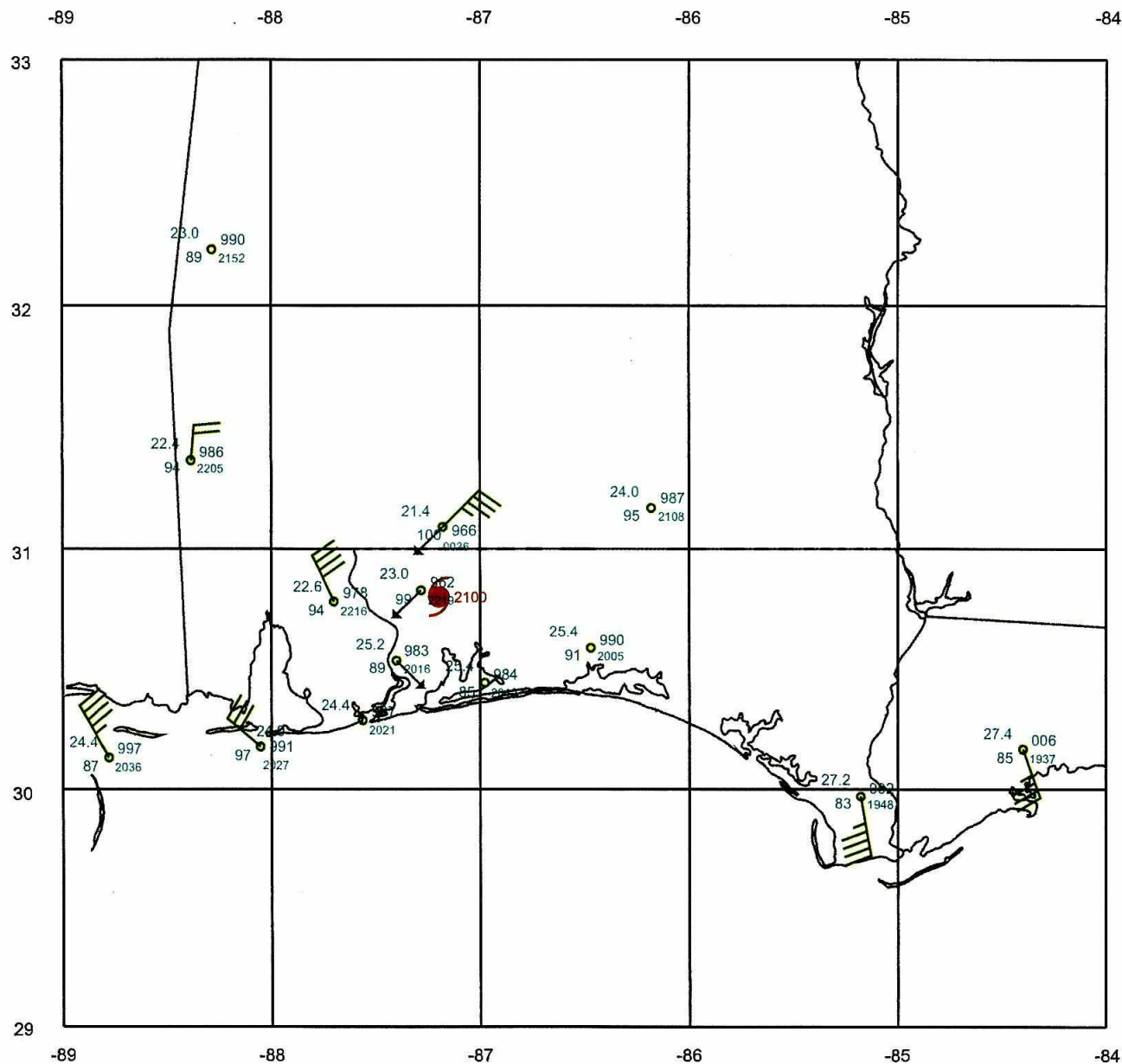
Channel 1 Noisy CHARGE TO HRD



Δ

mob\_evx\_tlh\_map.ps Center Lat: 30.50 Lon: -86.00





DENNIS

Surface

Date: 050710

Time: 18-30 UTC

STORM RELATIVE

NOAA/TPC/NATIONAL HURRICANE CENTER



**PAGE      OF**

## POSITION REPORT

## 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

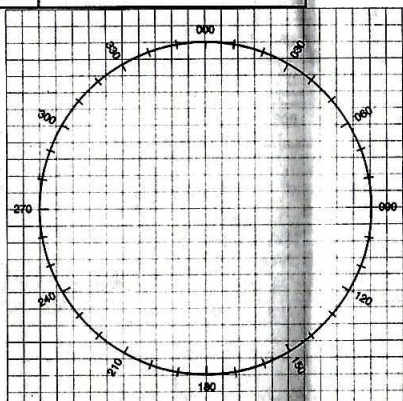
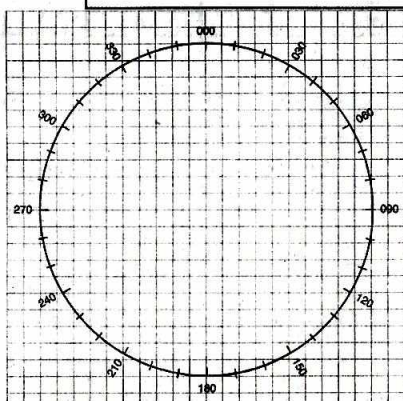
- FLIGHT LEVEL OR ALTITUDE \_\_\_\_\_  
- WE ARE A P-3 AIRCRAFT WITH \_\_\_\_\_ SOULS ON BOARD

- NATURE OF EMERGENCY

**- ASSISTANCE DESIRED**

- PILOT INTENTIONS

- WE HAVE	ENDURANCE REMAINING

[illegible]

1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

[illegible]



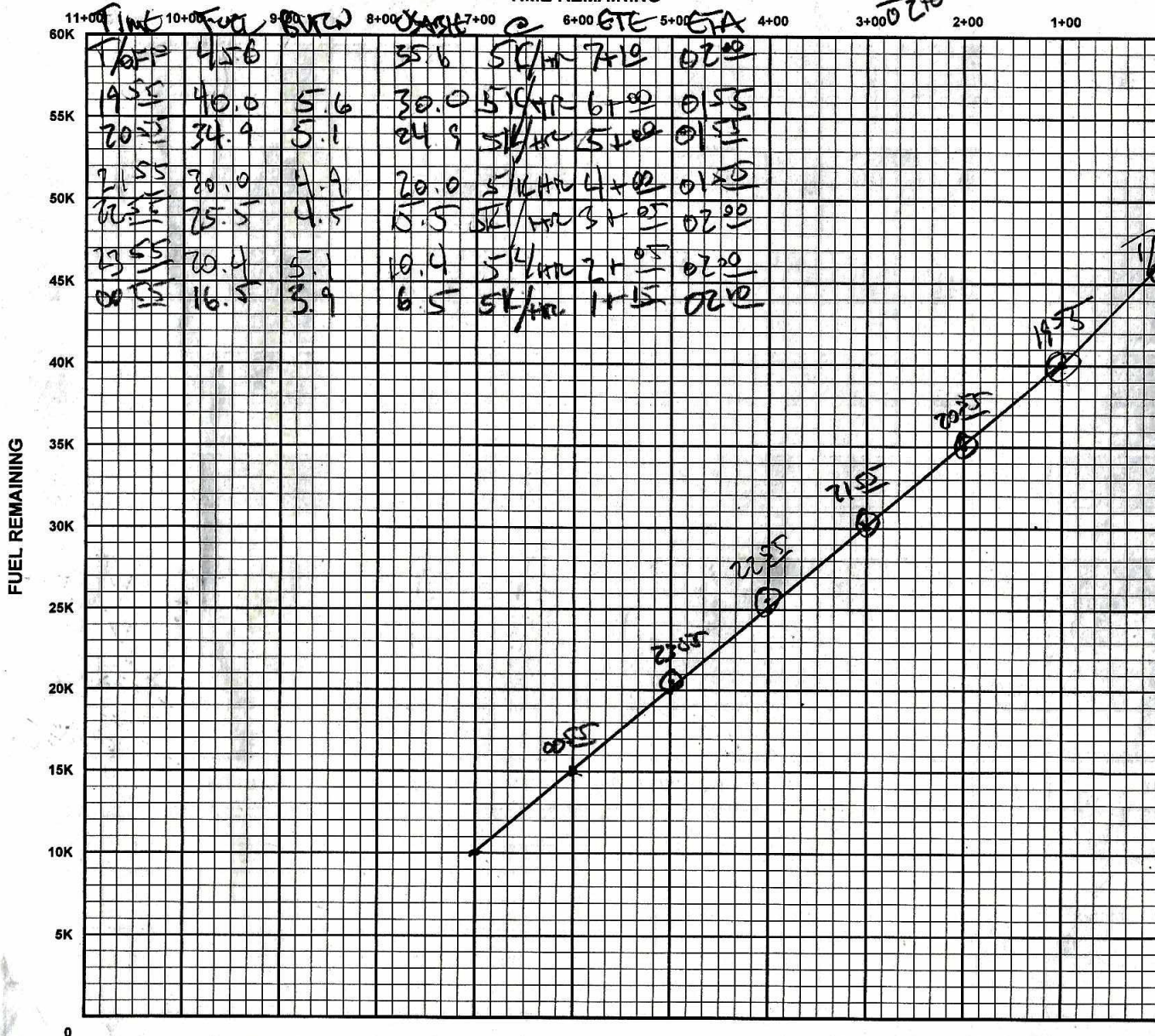




# RANGE CONTROL GRAPH

1850  
710  
2100

## TIME REMAINING



## 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	7+00
ENROUTE FUEL (6K 5K 4.5K RULE)	36.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	46.0
ACTUAL RAMP FUEL	45.6

## 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

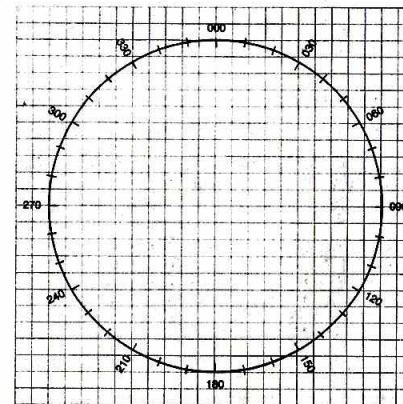
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

## 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	TAS	ITAS
11:00							
10:55							
10:50							
10:45							
10:40							
10:35							
10:30							
10:25							
10:20							
10:15							
10:10							
10:05							
10:00							
09:55							
09:50							
09:45							
09:40							
09:35							
09:30							
09:25							
09:20							
09:15							
09:10							
09:05							
09:00							
08:55							
08:50							
08:45							
08:40							
08:35							
08:30							