



NOAA P-3 N43RF

OCEAN HEAT CONTENT PRE-IKE



Flight ID: 080908I

Sensor or system

INE

Accelerometer

Temperature Probe

Dew Point Probe

Altitude (for vertical wind)

Static Pressure

Dynamic Pressure

Time Source

Constants File

Number or Name

1

1

1

2 (Vigilant)

Blended GPS/RINU

Rosemount Fuselage PSF

Rosemount Fuselage PQF1

Micro99

N/A

Notes:

There were no time/data gaps during this flight.

Due to hardware changes in some of the navigational equipment, a number of parameters have been adjusted in the netCDF file. RA159 and ALTI1 both display the blended altitude solution of the GPS/RINU system, RA232 displays the corrected HG9550 radar altitude, ALTI2 displays the uncorrected HG9550 radar altitude, and ALTCLN displays the NOVATEL radar altitude data.

Novatel altitude data occasionally exhibited erroneous spikes throughout the flight.

Temperature data from sensor number 3 is erroneous.

There was an ~40 mb difference in differential attack pressure between the fuselage and radome.

No Collins or Ashtech GPS data exist for this flight.

The King Liquid Water Sensor was inoperative throughout the flight.

Data from dew point sensor number 2 was edited in order to bring relative humidity values to ~100% during times when oversaturation occurred. These corrections occurred from 155242Z-155255Z, 192021Z-192034Z, 192113Z-192136Z, and 204852Z-204904Z.

SPECIAL NOTE!!! Vertical ground, vertical air and vertical speeds, computed using Dave Jorgensen's vertical wind algorithm should be used for vertical wind analysis.

	Takeoff	Landing
Aircraft Static Pressure	1017.6 mb	1011.5 mb
Corrected Tower Pressure	1015.9 mb	1013.2 mb

Flight Director: Martin Mayeaux (813) 828-3310 ext. 3086

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

Fit ID: 080908I	From: Kmcf	To: Kmcf
Fit. No: 08-046	Blk In: 2211 Z	Time On: 2202 Z
ETD: 1800 Z	Blk Out: 1538 Z	Time Off: 1547 Z
ETE: 6 + 00	Blk Time: 6 + 33 (6.6) Hrs	Fit Time: 6 + 15 (6.3) Hrs
Sponsoring Org: NHC	Program: Ocean Heat Content	Purpose: AXBT SURVEY, IKE

AOC Flight Crew

Aircraft Commander: Choy, B	Data System: Lynch, T
Co-Pilot: Elhardt, A	AVAPS: Naehar, D
Navigator: Kiddor, R / Bishop, J	System Eng: Smith, J
Flight Eng: Floyd, D	A A: San Souci, O
Flight Director: Mayeaux, M / Elhardt, A	A A:
Avionics:	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Josh Brewster	Scientist	HRD
Uhlhorn, E	Scientist	HRD
James, Benjamin	Scientist	HRD

Remarks (Storm Name, Mission ID, Recco Times, Fix Times) Recco Times Fix # Fix Time

Storm Name: IKE Laptop Serial & FO Layer problems at

Mission ID: NOAA3 1309A IKE Takeoff

Penetration number and time

Spike in Navatel 2120Z

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

Flight ID: 080908I	Time Off: 1547 Z	Time On: 2202 Z
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	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1017.6 mb	30.00 mb	1011.5 mb	29.92 mb

ATIS	Time	Observation
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Takeoff	1355Z	07013KT 105m few 250 29/25 A3000 RA -60
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Land	2055Z	09015G21KT 105m Sc+050 33/27 A 2991
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	Number	Data Disposition / Date / Quality
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Flight Level Tapes	2	
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Radar Tapes		
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Cloud Physics Tapes / CDs		
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Video Tapes		
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Dropsondes		Good: Bad:
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AXBT	47	
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AXCP		
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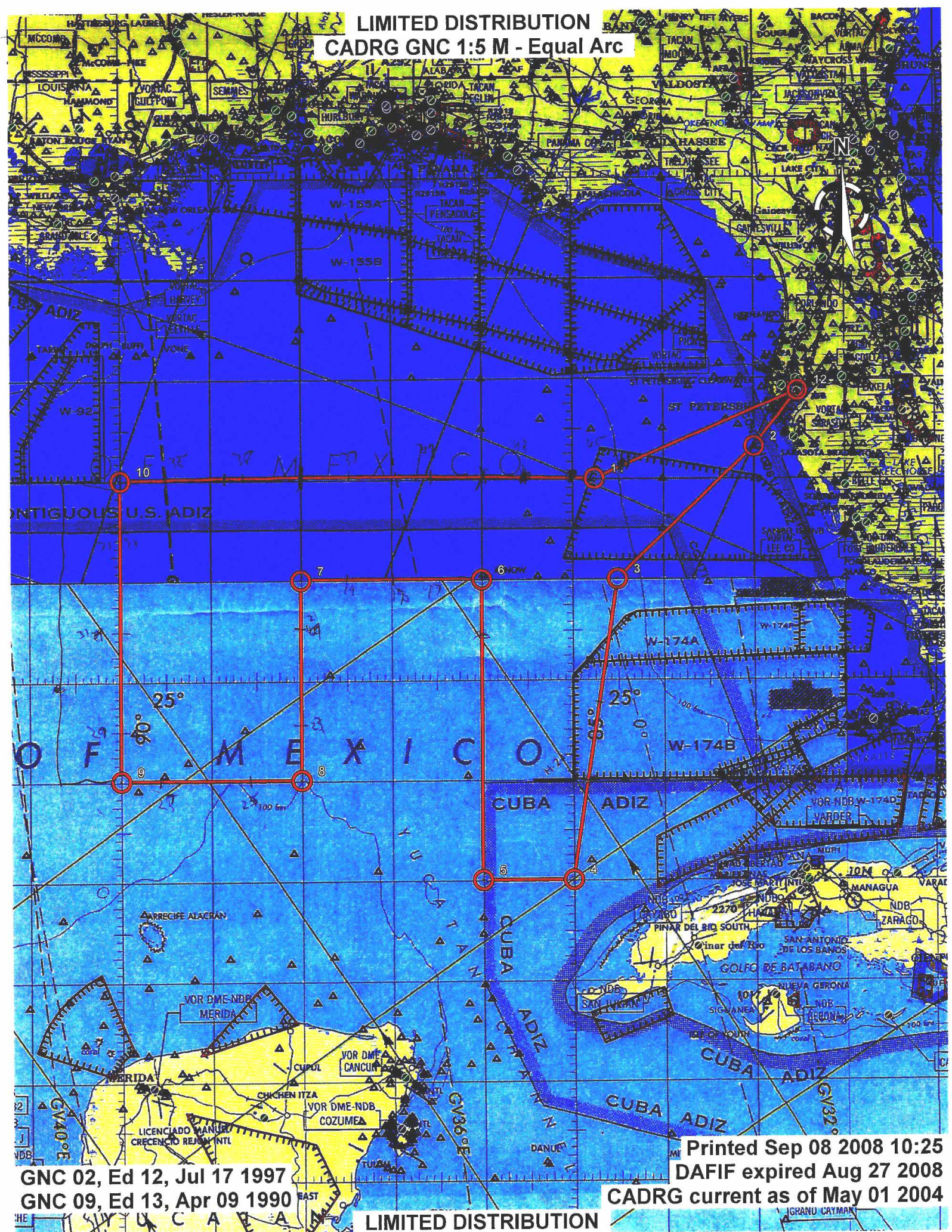
AXCTD		
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Remarks:		
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LIMITED DISTRIBUTION
CADRG GNC 1:5 M - Equal Arc



GNC 02, Ed 12, Jul 17 1997

GNC 09, Ed 13, Apr 09 1990

Printed Sep 08 2008 10:25

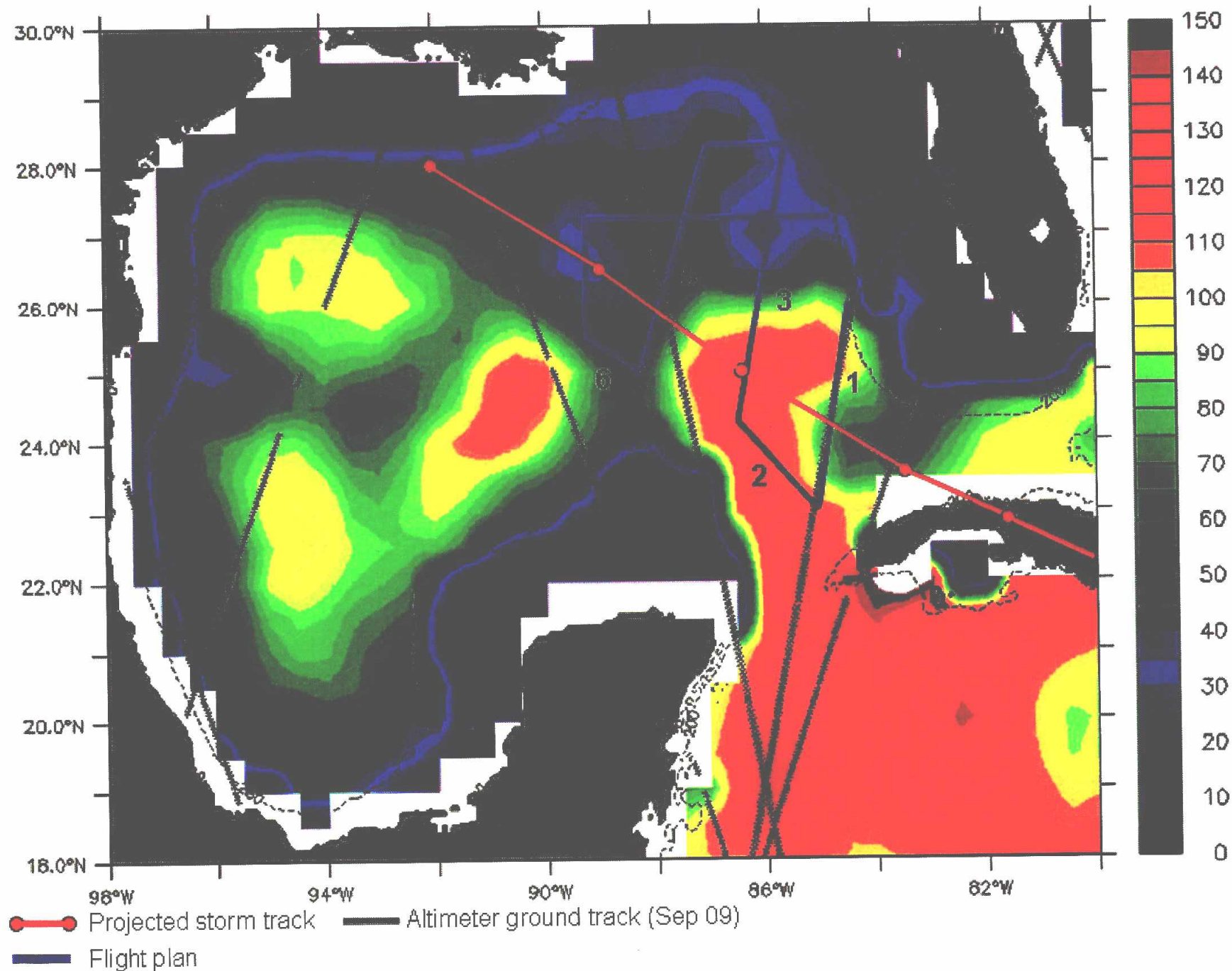
DAFIF expired Aug 27 2008

CADRG current as of May 01 2004

LIMITED DISTRIBUTION

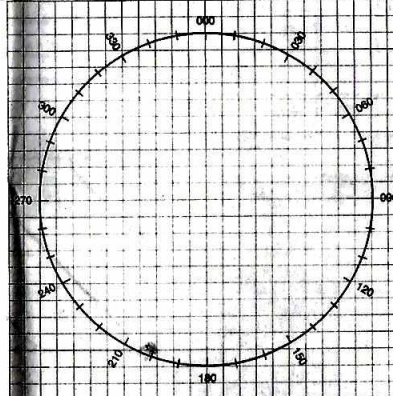
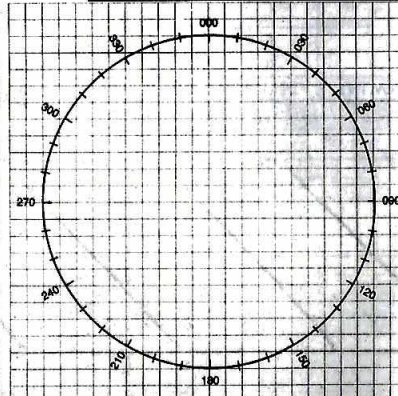
Sep-05-2008

OHC
 kJ m^{-2}



[illegible]

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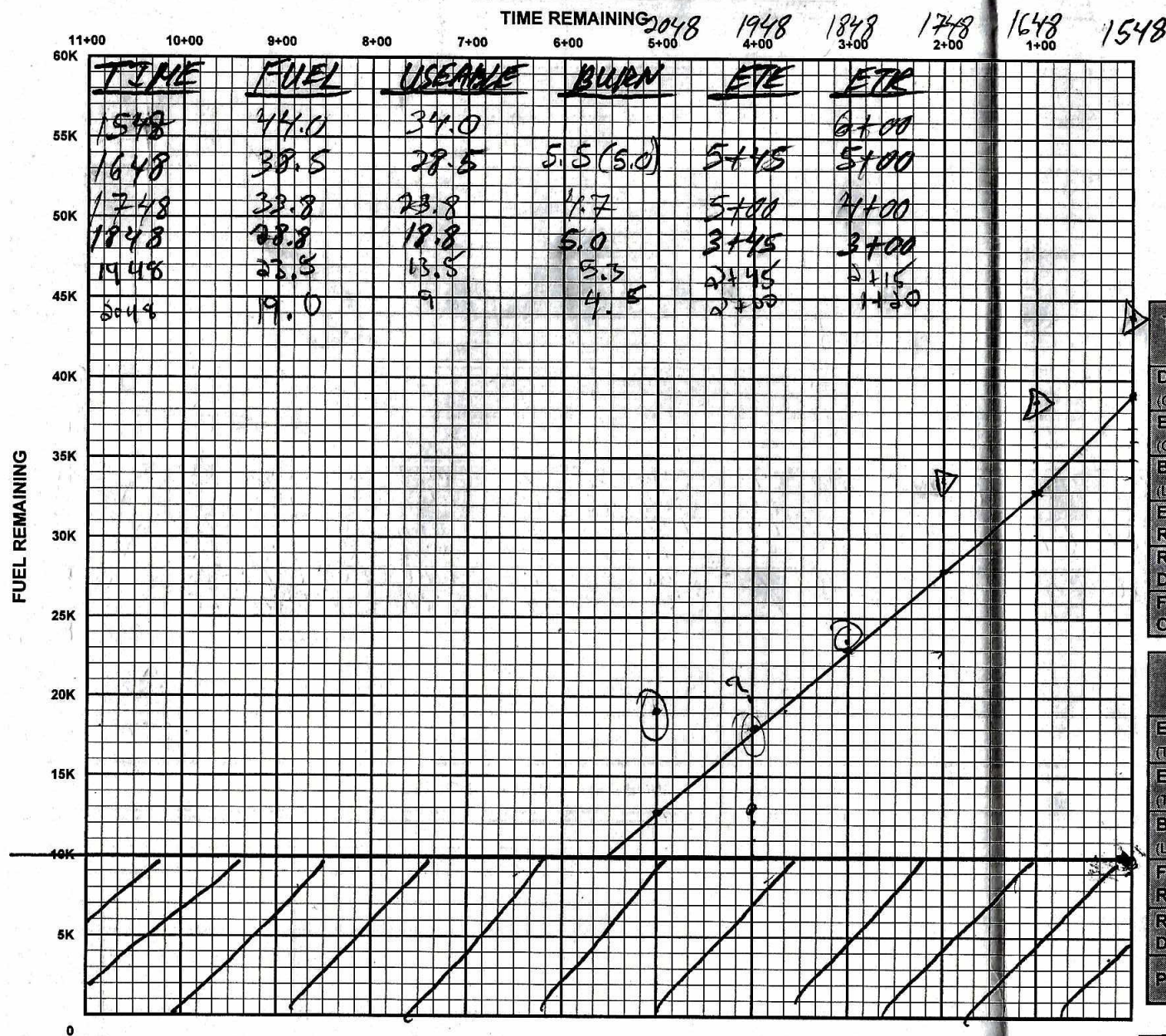
EMERGENCY MESSAGE

- 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]

[illegible]

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	6+00
ENROUTE FUEL (6K 5K 4.5K RULE)	29.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	39.0
ACTUAL RAMP FUEL	44.0

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

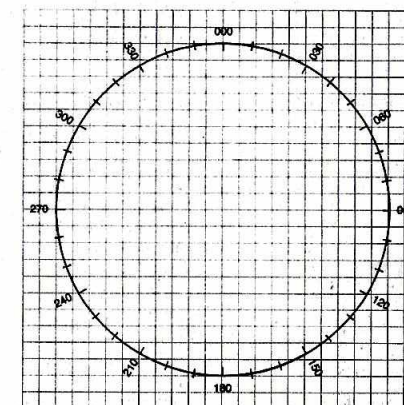
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX SIGHT

GMT	
GHA	
GORR	
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