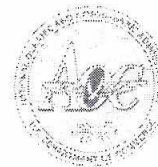




NOAA P-3 N42RF TROPICAL STORM ERNESTO



Flight ID: 060829H

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
1 (General Eastern)
Radar Altimeter 159
Rosemount Fuselage
Rosemount Fuselage 1281
Micro 99
CO2062.com

Notes:

There were a number of time/data gaps during this flight which occurred from 125110Z-125130Z, 125339Z-125430Z, and 164143Z-164150Z.

The King liquid water sensor was inoperative throughout the flight.

Altitude from inertial one and two were both inoperative throughout the entire flight.

There were several ground speed errors associated with the Collins GPS from 183600Z-183800Z.

There were numerous times during the flight where the dewpoint temperature exceeded ambient temperature resulting in RH>100%. This was likely due to 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. No edits were made to the data to correct this.

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	1013.2 mb	1008.3 mb
Corrected Tower Pressure	1012.9 mb	1013.2 mb

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

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

Flt ID: 060829H	From: Kmcf	To: Kmcf
Flt. No: 06 058	Blk In: 1909 Z	Time On: 1900 Z
ETD: 1000 Z	Blk Out: 0945 Z	Time Off: 0958 Z
ETE: 9 + 00	Blk Time: 9 + 24 (9.4) Hrs	Flt Time: 9 + 04 (9.1) Hrs
Sponsoring Org: NHC	Program: Recco (Sfmr)	Purpose: Ernesto

AOC Flight Crew

Aircraft Commander: Strong ✓	Data System: McMillan 00053
Co-Pilot: Giramonte	AVAPS: Reck ✓
Navigator: Siegel 00053, Bishop ✓	System Eng:
Flight Eng: Klippel ✓	A A:
Flight Director: Mayeaux ✓	A A:
Avionics: Olney 00053	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Chang, P ✓	PI	NESDIS
Chu, T ✓	CSCAT-KUSCAT	UMASS
Esteban, D ✓	d	JPL
Contreras, R ✓	CSCAT-KUSCAT	Umass/u Wash
Leighton, P ✓	3-D Winds	ARO
Metadden, J ✓	PM	AOC
Farr, W ✓	Obs	MacDill
Hanson, Kathryn ✓	Obs	MacDill

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

Storm Name: Ernesto

Mission ID: WMAZ 1505H Ernesto

Penetration number and time 15.16 m/s
158

10 Aoc Sondas

2225
7716

Recco Times

Laptop Problem at Takeoff
Cabin Pressure off by 700 m/s

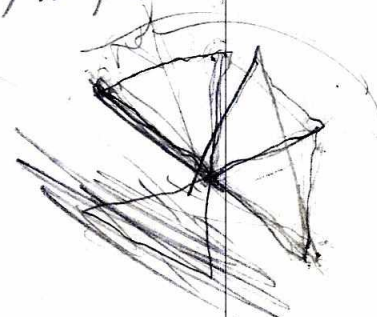
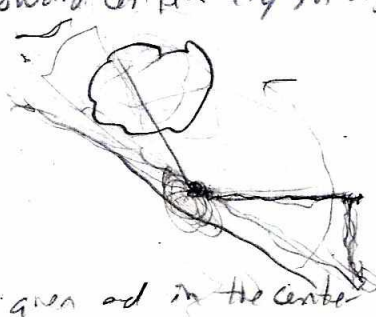
Fix # Fix Time
Total by 50 KTS 1706Z
1640Z 2339 7921
100K 49KT

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

Flight ID: 060829A		Time Off: 0956 Z		Time On: 1900 Z	
A/C: Takeoff		Wx Station: Takeoff		A/C: Land	
Pressure: 1013.2 mb		2991 mb		1008.3 mb	
2992 mb					
ATIS	Time	Observation			
Takeoff	0855Z	00004 P75m fuv30 set 090 S 4250 25/27 2991			
Land	1755Z	017004kt P65m 32/25 A2992			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes					
Dropsondes		11 Good: 8 Bad: 3 AOC Sondas 0 Rev F			
AXBT					
AXCP					
AXCTD					

Remarks:

Plan: AOC 10 Sondas to verify step frequency Depart 10Z.
 Center 22°30 79°W 22°40 79°30 at 1200Z 7352 Ex 2230 7849 1000 set-up
 through convection and toward center. fly through center. fly along coast



Real 99 will be out
 for 6-12Z fix.

Dropsondes - In convection area and in the center.
 Altitude - 7000 ft

23 34 793)

No vortex fixes yet.

1130-1530

0.78

Fix 1000Z 22°31 79°00

1100Z 22°43 79°09

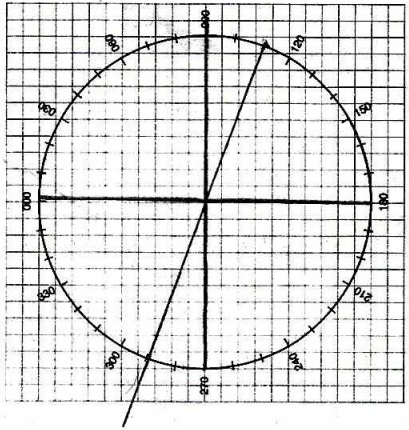
1500Z 23°28 79°25.34 236KTS at 1504Z

343

[illegible]

115

TEAL 64



CEX - TRUE BEARING METHOD						CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET			GNT	
MCH (READING)						GHA	
-MTH (SEXTANT)						CORR	
CE						GHA	
-VAR						LONG-W	
DEV						E	
						EXACT LHA	
						LAT	
						BODY	
						DEC	
						HO/D	
						CORR	
						HC	
						Z	
						ZN	

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			

ENROUTE FUEL	
ENROUTE TIME	9400
ENROUTE FUEL (6K 5K 4K 3K RULE)	46.0
RESERVE AT DESTINATION	8.0 (10K)
REQUIRED RAMP	54.0
ACTUAL RAMP FUEL	56.8

TACTICAL (OFFSETA TO DESTINATION)	
4 ENG	3 ENG
DISTANCE (OFFSETA TO DEST)	
ENROUTE TIME (OFFSETA TO DEST)	
BURN RATE (LBS/HR)	4500
ENROUTE FUEL REQUIRED	5500
RESERVE AT DESTINATION	
FUEL AT OFFSETA	

POINT OF SAFE RETURN	
4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)	
ENROUTE TIME (TO DEPARTURE)	
BURN RATE (LBS/HR)	4500
FUEL REQUIRED	5500
RESERVE AT DEPARTURE	
PSR FUEL	

TRUE AIRSPEED CROSS-CHECK					
TIME	IAS	PRESS ALT	"F" FACTOR	OAT	ITAS
1025	205	7.5	X	23C	238
1828	220	8.0	X	+21C	257

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			

DISTANCE REMAINING

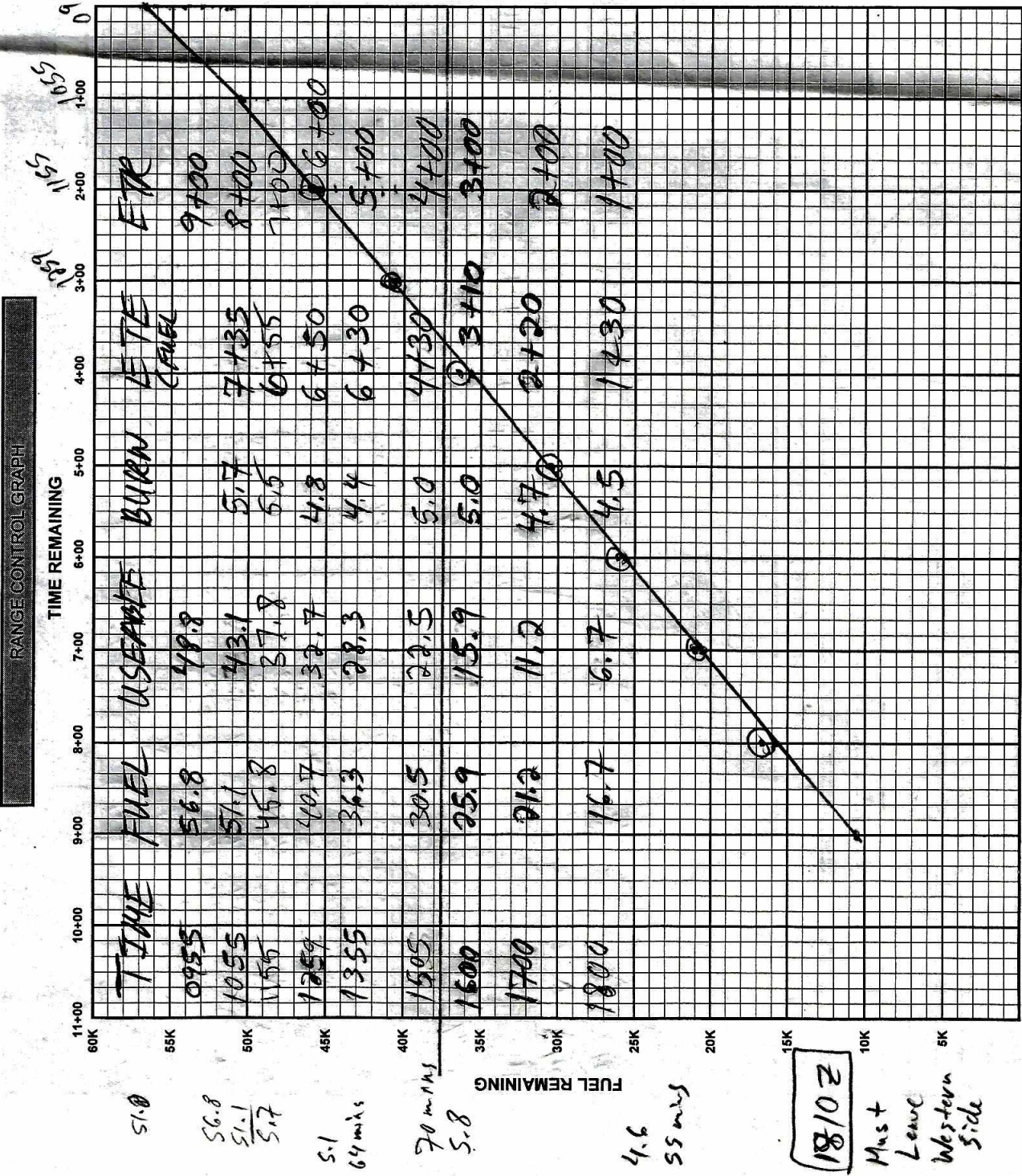
ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

1514 Z

N 23-33.38

W 79-30.44

CENTER



51.0

56.8

51.1

51.7

5.1

64 miles

70 miles

5.8

4.6

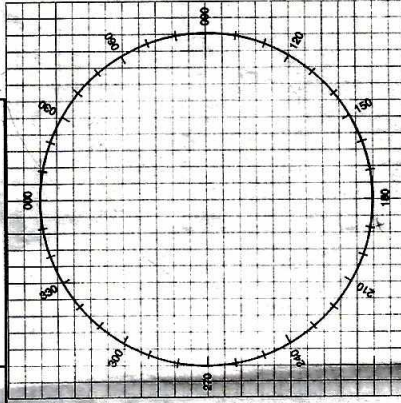
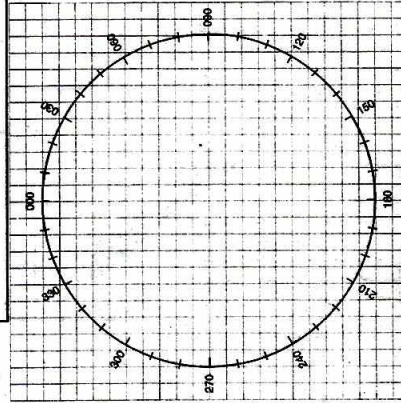
55 miles

1810 Z

Must + Lower Western Side

[illegible]

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:

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 _____

- HEADING **TRUE/MAG**

-AT_____KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE -

- WE ARE A P-3 AIRCRAFT WITH

- NATURE OF EMERGENCIES

- ASSISTANCE DESIR
PUOT INTENTIONS

- PILOT INTENTIONS
- WE HAVE
- ENDURANCE REMAINING

[illegible]

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

[illegible]

1640	AF	23 39	1008ms	49 kts
		79 21		

