



NOAA P-3 N42RF

Tropical Storm Alberto Training Flight



Flight ID: 060612H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	1 (General Eastern)
Altitude (for vertical wind)	Radar Altimeter 159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage 1281
Time Source	Micro 99
Constants File	CO2062.con

Notes:

There was one time/data gaps during this flight which occurred from 151830Z-152521Z. Also, Ambient Temperatures from sensors one and two had data gaps from 173719Z-173738Z and from 173802Z-173804Z.

Differences between dewpoint sensor one and two exceeded 2 degrees through much of the flight.

Data from dewpoint sensor 2 was substituted into dewpoint sensor 1 from 143104Z-143413Z with an offset of -2 degrees.

There was no altitude data from Inertial 1 and 2 throughout the entire flight.

From 143300Z through the end of the flight, Static Pressure from the wingtip and fuselage differed by 4 mb.

The King liquid water sensor (KLWC), differential attack pressure from the nose radome (PDAR), differential slip pressure from the nose radome (PDSR), dynamic pressure measured from the center port of the nose radome (PQR), total pressure measured at the nose radome (PTR), total and ambient temperature from sensor 3 (TA3,TT3), and dewpoint sensor 3 (TDM3, TD3), were all inoperative throughout the entire flight.

There were numerous times during the flight where the dewpoint temperature exceeded ambient temperature resulting in an 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 attempts were made to correct the data from dewpoint sensor 1 in order to bring the relative humidity values below 100%.

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	1013.8 mb	1014.6 mb
Corrected Tower Pressure	1014.6 mb	1014.2 mb
Flight Director:	Martin Mayeaux (813) 828-3310 ext. 3086	

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

Flt ID: 060612H	From: Kmer	To: Kmer
Flt No: 06-050	Blk In: 1747 Z	Time On: 1736 Z
ETD: 1400 Z	Blk Out: 1406 Z	Time Off: 1434 Z
ETE: 5+00	Blk Time: 3 + 41' (3.7) Hrs	Flt Time: 3 + 02 (3.0) Hrs
Sponsoring Org: Aircraft Ops Center	Program: Training	Purpose: FS Alberto

AOC Flight Crew

Aircraft Commander: Choy, B	Data System: McMillan, S
Co-Pilot: Garamonte, A1, Newman, C	AVAPS: DeFeo, G
Navigator: Brakob, Bishop	System Eng:
Flight Eng: Kippel	A A:
Flight Director: Shepherd, T, Mayeaux, M	A A:
Avionics: Olney, B	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Metadon, J	Programs	AOC

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

Storm Name: 36TS 12-14

Mission ID: NORAZ WXPDA Alberto ALQ12006

Penetration number and time: HD 27.28 84.82

Recco Times
 00 nm ~~100~~ 46
 27.1 85.9 997ms
 27.3 85.58
 74kt at 2500

Fix # Fix Time
 2729 8348"

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

Flight ID: 060612H Time Off: 1434 Z Time On: 1747 Z

A/C: Takeoff Wx Station: Takeoff A/C: Land Wx Station: Land

Pressure 1013.8 mb 2996 mb 1014.6 mb 2995 mb

ATIS Time Observation

Takeoff 1255Z 09010KT 35m -RA SCT030 OVC200 23/23 2996

Land 1555Z 09007KT 55m -RA SCT050 OVC25 22/22 102996

Number Data Disposition / Date / Quality

Flight Level Tapes 4

Radar Tapes 1

Cloud Physics Tapes / CDs

Video Tapes 0

Dropsondes 3 Good: 3 Bad:

AXBT 2

AXCP

AXCTD

Remarks: 1355Z 10010KT 55m -RA 06m 008 23/22 102996
OVC 035

Data System Failed 151916Z

Sprk 27.29 83-46 27.1 85.9

27-25.87 83-46.06

MISSION LOG

PAGE 1 OF 1

POSITION REPORT

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/CV MF/CV
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 _____

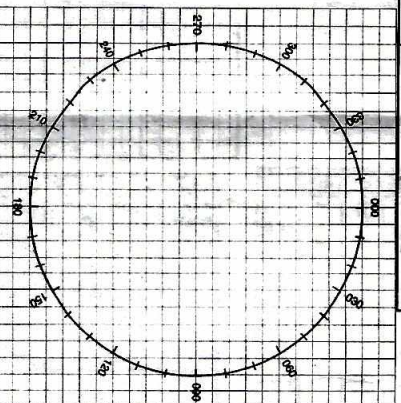
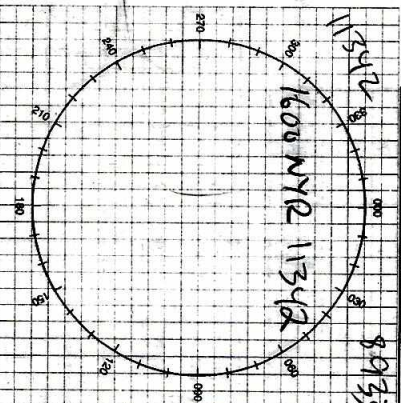
FLIGHT LEVEL OR ALTITUDE _____
WE ARE A P-3 AIRCRAFT WITH _____ SOUS ON BOARD

NATURE OF EMERGENCY _____
ASSISTANCE DESIRED _____
PILOT INTENTIONS _____
WE HAVE _____ ENDURANCE REMAINING _____

CLEARANCES

OTHER

FREQ	ALT	HDG	OTHER
118.8	10K	18270	Alt 25.97
123.7	5K	140	
135.5	2000K	100	
123.7			



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

LNUB

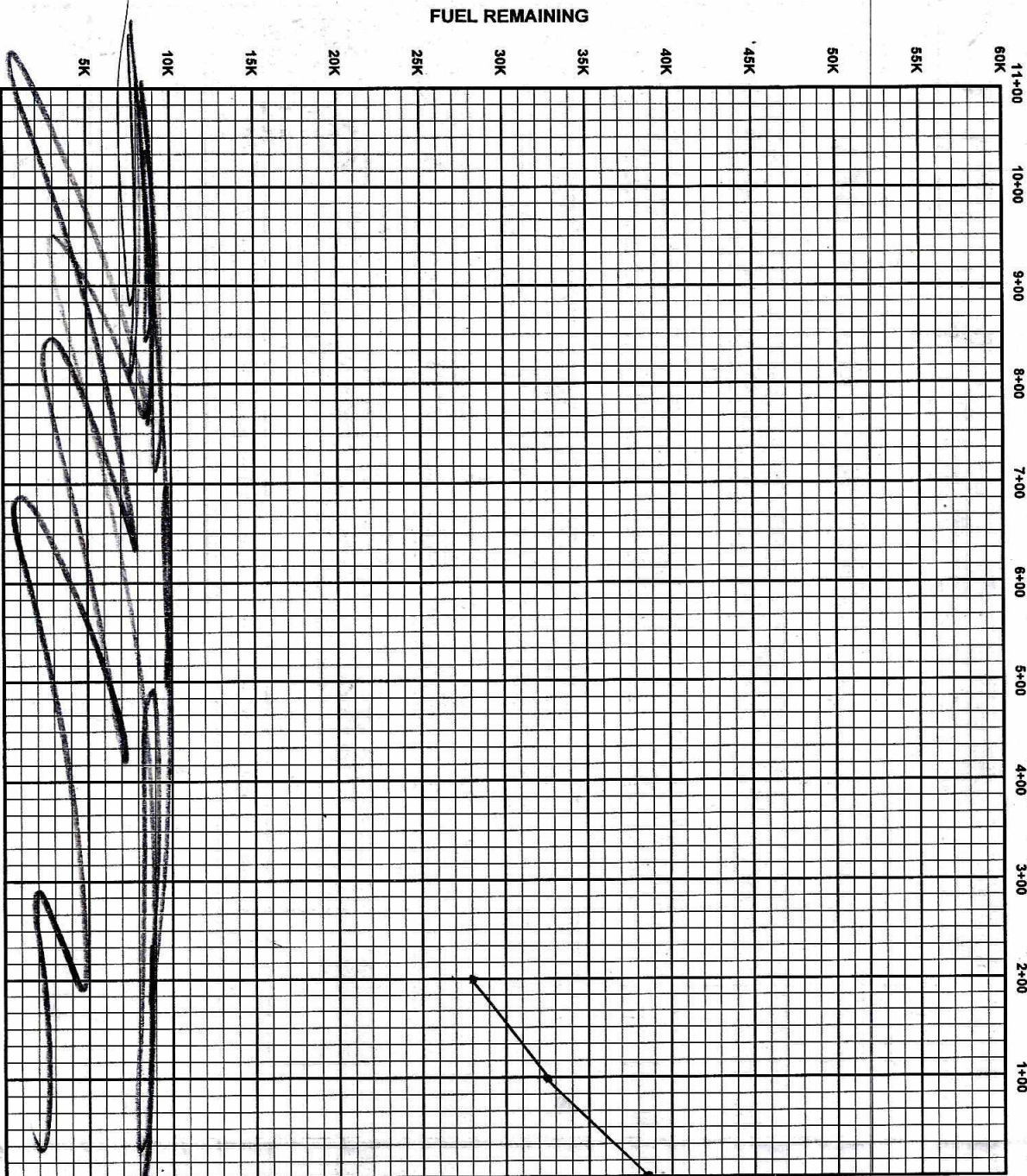
W/Name

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR	TH	DR	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1402	ENB	N																			
1407	TAXI	W	23		W																NYR 11396 H
1443	XV	27-42.6 82-56.7	27-42.8 82-56.5	+0.2 +0.2	27-42.6 82-56.6	0 +0.1	266	2W	265	7R	273	258	40	130	10K	233					PTE 120/603
1534	Δ	27-42.7 84-56.1	27-42.8 84-56.2	+0.1 +0.1	27-42.7 84-56.7	+0.1 +0.1	266	2W	264	7R	273	230	180	55	10K	233					PTE 120/603
1634	Δ	27-42.8 85-47.8	27-42.9 84-47.4	+0.1 +0.4	27-42.7 84-48.0	+0.5 -0.2	108	0	108	18L	090	236	188	70	5K	233					
1736	Δ	27-42.8 85-47.8	27-42.9 84-47.4	+0.1 +0.4	27-42.7 84-48.0	+0.5 -0.2	108	0	108	18L	090	236	188	70	5K	233					

RANGE CONTROL GRAPH

TIME REMAINING

1834 1834 1634 1534 1434



DISTANCE REMAINING

ETP = .5(TOTAL DISTANCE x 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	5:00
ENROUTE FUEL (6K SKED RULE)	26K
RESERVE AT DESTINATION	10K
REQUIRED RAMP	36K
ACTUAL RAMP FUEL	38K

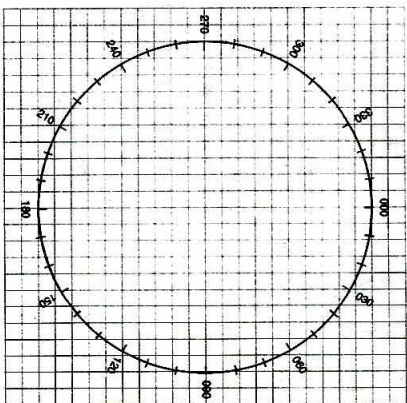
TACTICAL (OFFSTA TO DESTINATION)	
4 ENG 3 ENG	
DISTANCE (OFFSTA TO DEST)	
ENROUTE TIME (OFFSTA TO DEST)	
BURN RATE (LBS/HR)	4500 5500
ENROUTE FUEL REQUIRED	
RESERVE AT DESTINATION	
FUEL AT OFFSTA	

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	

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

CEX SIGHT			
GMT			
GHA			
CORR			
GHA			
LONG -W			
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			



WIND FACTOR	
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 ITAS

39.3K
38.5 -> 38.0K

Splash #2
270228

840282

MISSION PREFLIGHT LOG

DESTINATION
LMCE

NAVIGATOR
LEON BLAKES

MISSION
TS ARBOR #1

AIRCRAFT COMMANDER
CDR CROT

FLIGHT DIRECTOR
MAYEARD

SCHEDULED / ACTUAL TAKEOFF Z

DATE OF TAKEOFF
1400 / 1434

1250000

WP	LAT / LON	RTE	MH	VAR	TH	DR	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
1	27-51 82-30							250	L	✓	700	250	10	110				→ PLE
2	27-54.5 82-41.5							✓	✓	✓	1000	✓	70	115				→ PLE 235/20
3	27-15 83-46							✓	✓	✓	✓	✓	135	135				→ BUOY
4	26-04 85-56							✓	✓	✓	✓	✓	15	120				→ EYE
5	27-06 86-42							✓	✓	✓	✓	✓	75	120				→ BUOY
6	26-04 85-56							250	✓	✓	✓	✓	135	135				→ PLE 235/20
7	27-15 83-46							✓	✓	✓	✓	✓	70	115				→ PLE
8	27-54.5 82-41.5							✓	✓	✓	✓	✓	10	110				→ LMCE
9	27-51 82-30																	

Not plotted
2495 with 5000
OTAS N

INS PERFORMANCE	
INS 1	INS 2
BEGIN ALIGN TIME	
ALIGN STATUS (0-5)	0
END NAV TIME	1736
START NAV TIME	1327
DELTA LAT	4+09 4+09

TERMINAL ERRORS	
INS 1	INS 2
DELTA LAT	-0.8 -0.6
DELTA LON	41.7 +0.6
RGS	0 1
RADIAL ERROR	2 1

REMARKS	

060612H	Time	Lat	Lon	TA	TD	Trk	Hdg	RA	PS	SP	WD	WS	WZ
	SFWS	Comments											
130846		27.50.94	-82.29.64	22.6	15.1	105.1	6634.0	56.3	5.5	5.7	test	test	
134712		27.50.94	-82.29.58	23.1	15.5	7.0	1014.5	1015.3	103.7	5.7	.2	test	
134810		27.50.94	-82.29.58	23.2	15.5	137.7	135.1	7.0	1014.5	1015.3	141.0	4.7	.2
134840		27.50.94	-82.29.58	23.2	15.5	138.5	135.2	7.0	1014.4	1015.2	146.3	6.9	.4
0.0	TEST												
143543		27.47.70	-82.33.36	21.8	18.3	190.6	185.7	433.0	964.7	1013.6	125.7	11.6	-.3
17.8		takeoff											
145540		27.25.80	-83.46.08	8.8	6.0	208.7	204.1	3201.0	696.6	1010.4	173.9	18.6	-.1
20.2		bt sonde 1	1004mb										
151059		27.29.10	-83.46.02	8.7	6.3	39.6	45.0	3232.0	694.2	1010.5	180.9	19.2	.1
16.5		SPLASH PT											
155650		26. 3.36	-85.56.70	9.8	7.2	273.3	270.2	3213.0	694.5	1007.2	228.8	11.2	.3
11.4		buoy											
163349		27.14.58	-84.49.20	18.0	15.8	93.0	107.7	1552.0	841.2	1004.5	191.9	30.7	-.7
21.6		sonde bt											
164550		27.18.24	-84.49.98	18.1	16.7	260.8	246.1	1533.0	842.4	1003.6	188.2	33.0	-.4
20.6		SPLASH											
165514		27.46.44	-84.43.86	17.0	15.8	27.9	38.6	1554.0	841.4	1005.6	171.0	34.9	.1
22.6		sonde 3											

145541
 425
 144966
 150000

NOAA · AOC · SED
N42RF AVAPS DROP LOG

Project: ALBERTO TEST

Mission: SHAKEDOWN

Flight ID : 060612h

Take Off:

Landing :

Flt Dir: MARTY

Launcher S/N:

[illegible]

83.46