

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 20120822H1	From: TBPA	To: TBPA
FLT #:	Blk In: 0404 Z	Lnd Time(on): 0357 Z
ETD: Z	Blk Out: 2003 Z	T/O Time (off): 2016 Z
ETE:	Total Blk: 8.0	Total Flt: 741 (7.7)
Sponsoring Org: HRO/emc	Program: TDR	Purpose: ISAAC

AOC Flight Crew

Aircraft Commander: Halverson	Data System: Lynch, T
Co-Pilot: Kibbey, Martin	Avaps: Richards
Navigator: Siegel, Brakob	System Engineer: Peek
Flight Eng: Klippel,	AA:
Flt Director: Williams, Flaherty	AA:
Avionics: Newnam	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back.

(15)

of people listed on back: (3)

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1003.8	1003.8	1005.8	1005.8

ATIS - Takeoff

ATIS - Land

Data Source	Number	Data Disposition / Date / Quality / File Name(s)		
Flight Level Tapes				
Radar Tapes				
Dropsondes	27	Good: 27	Bad:	Sent:
AXBT				

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times:	Fix #	Fix Time
Storm Name: ISAAC ALO92012	3 reccos		
Mission ID: NOAA2 0409A			

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FLT ID: _____ T/O Time: _____ Z Lnd Time: _____ Z

Name (Last, First)	Activity on Aircraft	Affiliation
Rogers, Rob	PI	HRD
Gamache, John	Radar	HRD
Vukicevic, Tami	Sci	HRD

Remarks:

MISSING val's of Td 3 / / / instead
 of 4

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FLT ID: 2020828+12	From: KJAX	To: KMCF
FLT #:	Blk In: 0426 Z	Lnd Time(on): 0414 Z
ETD: 20 Z	Blk Out: 1936 Z	T/O Time (off): 1943 Z
ETE: 8	Total Blk: 8.8 8+50	Total Flt: 8.5
Sponsoring Org: HRO/EMC	Program: TDR	Purpose: ISAAC

AOC Flight Crew

Aircraft Commander: HALVERSON	Data System: LYNCH, T
Co-Pilot: KIBBEY, MARTIN	Avaps: PAUL, S
Navigator: BRAKOB, [unclear]	System Engineer: RICHARDS
Flight Eng: KUPPEL, [unclear]	AA: [unclear]
Flt Director: WILLIAMS, FLAHERTY	AA: [unclear]
Avionics: NAETHER	Crew Chief: [unclear]

Participating Scientists, Visitors, & Add'l Aircrew on back. # of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1012.3	1011.5	1013.2	1014.4

ATIS - Takeoff: 1956Z 17005 4SM -RA SCT038 ST 130 BAN250 28/26
 ATIS - Land: 290403Z 19013 10SM FCW150 22/26A2997

Data Source	Number	Data Disposition / Date / Quality / File Name(s)
Flight Level Tapes		
Radar Tapes		
Dropsondes	35	Good: 34 Bad: 1 Sent:
AXBT	22	

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times:	Fix #	Fix Time
Storm Name: [unclear]		1	971/2155
		2	971/2244
		3	E 970/2344
		4	967/0042Z
Mission ID: NOAA 3309A ISAAC		5	E 971/10145Z
		6	966/10235

5x6
6
PENNIES

51 obs count
52 hdots

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FLT ID: 20120828H2 T/O Time: 1943 Z Lnd Time: 0414 Z

Name (Last, First)	Activity on Aircraft	Affiliation
DUNION, JASON	PI	HRD
BUCCI, LISA	DRPS	HRD

Remarks:



N42RF ERROR SUMMARY
TS ISAAC, TBPB - TBPB
22 Aug 2012



Flight ID: 20120822H1

<u>Sensor or system</u>	<u>Number or Name</u>
Inertial Selected (for wind derivation)	INE 1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.2
Dew Point Probe	TDM.2X
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Altitude (for vertical wind)	AltI-GPS.1
Flight Directory	acdata/MET/2012/20120822H1
Constants File	20120822H1/AAMPSCconfig/core/n42.xml

Local Met Data:	<u>Takeoff (2016Z)</u>	<u>Landing (0357Z)</u>
Aircraft Static Pressure (PSM.2)	1003.8 mb	1005.8 mb
Tower Pressure (corrected)	1003.8 mb	1005.8 mb

Notes:

There was a data gap in all parameters from 000009Z – 000051Z.

The Buck Dewpoint, TDM.1 became erroneous from 235652Z – 001500Z. The Edgetech dewpoint, TDM.2, performed best and was used as default. However, during one small spike, TDM.1 was substituted in from 235652Z – 014702Z. On Descent, both dewpointers spiked erroneously, during the time TDM.2 spiked, statistical interpolation methods were used from 034131Z – 034238Z. Dew point values intermittently exceeded ambient temperature values during portions of flight where the aircraft was in precipitation, causing RH values greater than 100%.

The Novatel Alt, Lat and Lon (GPS.3) all spiked for one second at 232950Z. The blended inertial-GPS solution (Alt, Lat and Lon I-GPS.1) is the default position source.

SPECIAL NOTE!!! The variable names GSZ_DPJ, ASZ_DPJ and WSZ_DPJ in the netCDF file represent vertical ground speeds, vertical air speeds and vertical wind speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

All other AOC instruments worked properly.

There were 27 GPS dropsondes deployed from the aircraft internally, all 27 were sent.

Flight Director:
Phone #:

Jess Williams / Paul Flaherty
(813) 828-3310 ext. 3140/3094



N42RF ERROR SUMMARY
TS ISAAC, TBPB - TBPB
22 Aug 2012



From 030156Z until landing, 9 one second data gaps were observed in some derived and reference parameters (with a .d or ref extension). These occurrences were very infrequent and greatly varied among the list of derived parameter values. In other words wind direction (WD.d) may show a 1-second gap once during the flight but no other derived parameter values would exhibit a data gap for that same time. Likewise after a period of time elapsed a different derived parameter's value, say true airspeed (TAS.d), would be missing but other derived parameter outputs would be present.

Since it would be tedious and time consuming to list all the individual derived parameters values missing for a specific time, it was decided to provide the the customer the beginning and end times for the time period when these data gaps occurred.

Flight Director:
Phone #:

Jess Williams / Paul Flaherty
(813) 828-3310 ext. 3140/3094

20120824

10 TBPB 1717
J2M

~~1356-134~~

2016-0357

PS1-2 diff 26mbentire flight

T/O

TBPB

LND

TBPB

PS2 1003.8 202 @ 1010

PS2 1005.85

Q1012

PS1 1001.3 1003.8

PS1 1003.6

1005.8

Data Gap 000008Z - 000052Z ~ 465

PQ ✓ PD ✓

Alt: Navatel spike 23550Z

USE TDM,2

"fx 234244" 234305

erroneously

TDM,1 ^{out} 23565Z - 0015Z in "cntr"

TDM,2 at 034131 - 034238 on descent

UWZ issue

sub 2 for 1

014632Z - 014702Z

patch ~~to~~ OS Manual
stat. shcd interpretation/extraction

NO OS plotting

UWZ, UWZ gap, spikes on descent 0344Z - 0357Z
but not all

→ WD, WS, UINE, UTAU, UTAU, UWING

CHK gS on ground

only 1st gap 03446 - 034410

TRK

radiometers ✓

up radiometer

Sensitivity, 1 empty?

1st GAP

034416-18

course corr.d (b)

DA.d (b)

OSLP.d (b)

DWING.d (b)

GS.d (only 1st)

GOXref, Zref (only 1st)

TRK.d (only 1st)

TRKdesired (both)

URAP.d (both)

USLP SQ.d (both)

UWING SQ.d

UWX.d, UWY.d (both)

VINE.d (both)

WD.d, WS.d (both) ~~UWVWXYZ.d~~

WSH.d (both)

UWZ.d

circle =

NO GAP after

ACAT-4

2nd Gap

034421-23

ACCXref, ACCZref

ATGA.d

ALTref

ACCZHECT-GPS.1

ACCZ to Hect-GPS.2 (slightly after) ^{but before}

AH GPST.1 (slightly after) ←

AHI-GPST.1

~~URSE~~ corr.d

DA.d, DIFC.1

DV.d

HI.d

latref

lonref

Pitchref

PSURF.d

ROLLref

SST.1

SAMPLWS + RR

TADGref

WDIR x, y, z.d

VIE, URX, URZ.d

VSUPxyz.d

VTPLxyz.d

After ACAT-4

1st GAP

CORSE CORR.d (b)

PR (desired.d (b)

UWING-SA.d (b)

USLIP-SQ (b)

WS (KT)

2nd GAP

ACCREF

Acc 2 filter-GPS.1

2 (sketchy after
(034427z))

AITGPSFF.1

AIT-GPSFF.1

DWING.d (only 2nd)

DSLIP.d (only 2nd)

SST.1

SRRR WSRR

UDIR x Y Z.d

UIZ

UWE

UWE (only 2nd)

AC = 175730 - 280701

DAWN
287 1025

720

320
 1433 61 48
 14 15
 47 1/2
 23
 10

-VT
 SAND -
 14 15
 60 58
 16 46
 63 33

15 17 61 29
 15 47 15 30

16 45 60 20

14 05 63 06

13 51 60 46

02 05

15 35

62 34

02 34

-2100D

15 39

62 22

076

15

15 34
 60 53

14

15 31 59 48

17

18

63

62

61

SALT
 2206Z

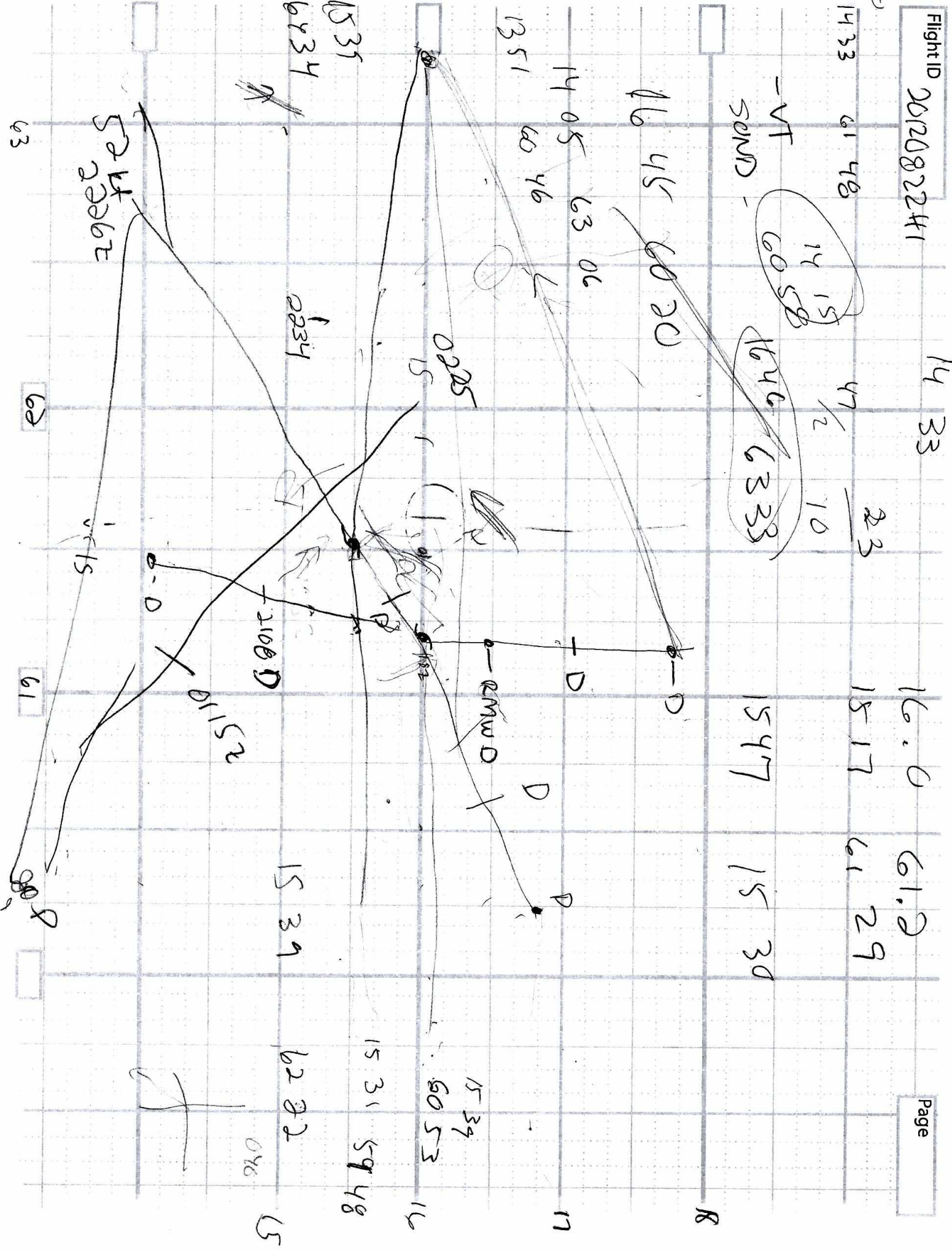
1015

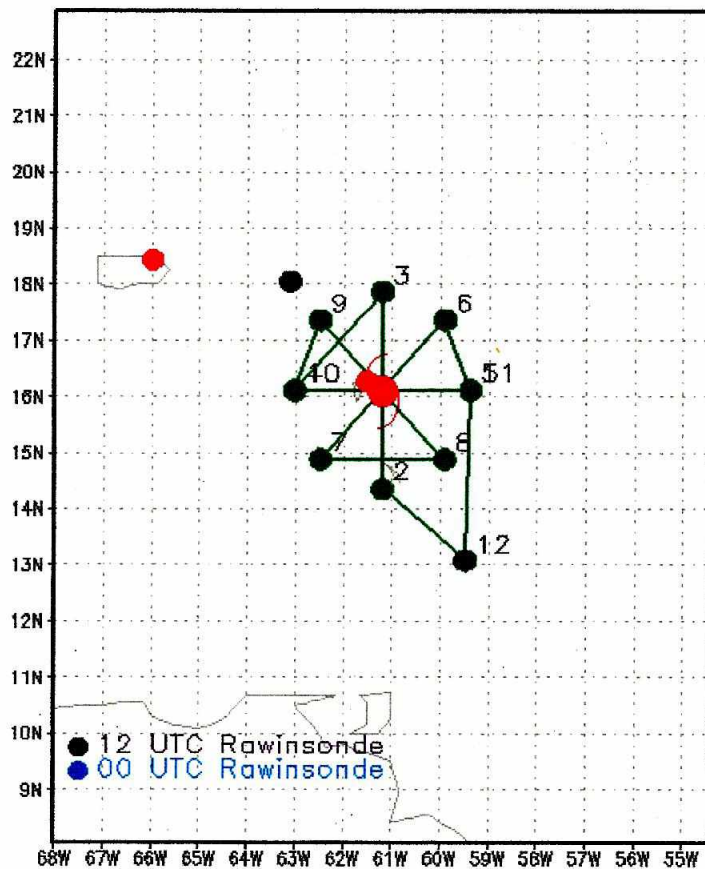
0.0

2510

15 31

008





GRADS: COLA/IGES

2012-08-22-07:58

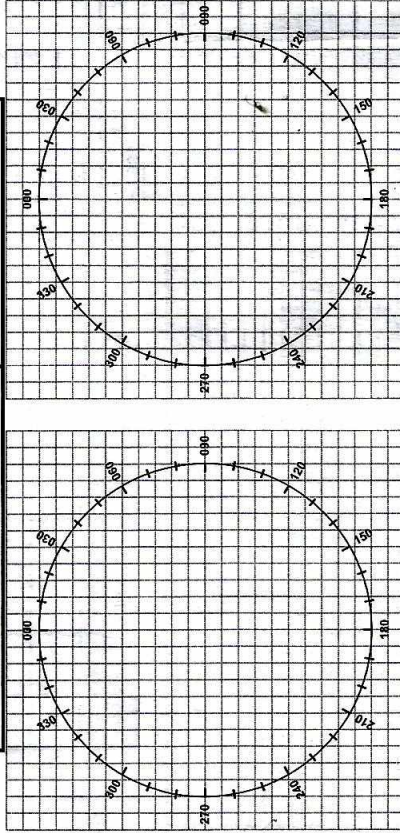
Tea 73 2308 v2

CLEARANCES

FREQ	ALT	HDG	OTHER
50107Z	1010 F		45 min b IP
129.55			MEA 5700 (Dominica)
121.0			MSA TB08 3200
121.3			
123.7			
118.15			

MISSION LOG

PAGE ___ OF ___



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:

UHFVOICE VHFVOICE MFVOICE HFICW MFICW
243.0 121.5 2182 KHZ 8384 KHZ 500 KHZ

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA 42 NOAA 42 NOAA 42

- 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 15 SOULS ON BOARD

- NATURE OF EMERGENCY _____

- ASSISTANCE DESIRED _____

- PILOT INTENTIONS _____ 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
1954	START																				
2003	TAXI																				
2015	A10	13-07.9 59 42.0	13-07.9 59 42.0	0	13-07.8 59 42.0	+0.1	324	15W	309	9L	300	226	231	9	7100	231					300/13 B61
2020	X V	14-01.3 61 12.2	14-01.3 61 12.2	+1.2	14-01.3 61 12.2	0	022	15W	007	7L	360	259	099	25	100	296					
2120	A	16-33.8 62 28.6	16-33.1 62 27.2	+1.7	16-34.3 62 28.5	-0.5	245	14W	229	70R	229	280	042	52	080	247					
2310	A	15-30.4 60 14.1	15-28.4 60 17.9	+2.0	15-31.0 60 13.3	-1.2	107	15W	092	1L	223	223	139	23	100	239					
0010	A	14-51.0 62-17.9	14-47.6 62-19.9	+3.4	14-50.7 62-20.0	-2.1		14W			226	253	083	9	100	246					
0103	A	15-24.3 62-08.6	15-21.9 62-10.7	+2.4	15-28.7 62-08.7	-2.4		15W			316	254	138	16	100	245					
0216	A	15-39.0 64-32.1	15-38.6 64-30.3	+0.4	15-38.0 64-27.8	+4.3		13W			091	232	032	23	100	246					
0310	A	14-53.0 61 18.2	14 51.4 61 21.1	+1.6	14 52.7 61 17.2	+1.3	108	15W	093	3L	090	246	173	17	100	249					
0357	LAND																				
0404	BLACK																				

157 62.2

9 = 16-42N - 64-06W

10 156-39 69-34

11 15-39 60-53