



## Belize Accident and Incident Investigation Unit

<b>Report No.:</b>	<b>I-01-06-2019</b>
<b>Name:</b>	<b>Incident Final Report.</b>
<b>Registration:</b>	<b>N936AN</b>

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Publication date: 21<sup>st</sup> October, 2019

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## **INTRODUCTION**

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**0.2 INDEX**

**INTRODUCTION**

**COVER PAGE.....1**  
**0.1 INTRODUCTION/NOTICE OF PROPERTY RIGHTS .....2**  
**0.2 INDEX .....3**  
**0.3 GLOSSARY .....4**  
**0.4 ABBREVIATIONS.....4**  
**PAGE INTENTIONALLY BLANK.....5**

**PART 1- AIRCRAFT FACTUAL INFORMATION**

**1.0 PART 1.....6**  
**1.1 FACTUAL INFORMATION.....6**

**PART 2 - EVENT SYNOPSIS AND FACTUAL INFORMATION**

**2.1 SYNOPSIS.....7**  
**2.2 HISTORY OF FLIGHT .....7**  
**2.3 PLACE OF IMPACT .....8**  
**2.4 INJURY TO PERSONS.....8**  
**2.5 DAMAGE TO AIRCRAFT .....8**  
**2.6 OTHER DAMAGES .....8**  
**2.7 PERSONAL INFORMATION OF THE PILOT .....8**  
**2.8 PERSONAL INFORMATION OF THE CO-PILOT .....8**  
**2.9 AIRCRAFT INFORMATION.....8**  
**2.10 AIRCRAFT INFORMATION.....8**  
**2.11 MOTOR and PROPELLER.....9**  
**2.12 FUEL.....9**  
**2.13 AUXILARY EQUIPMENT.....9**  
**2.14 DEFECTS .....9**  
**2.15 WEIGHT AND BALANCE.....9**  
**2.16 METEOROLOGICAL INFORMATION.....9**  
**2.17 NAVIGATION AIDS.....9**  
**2.18 COMMUNICATIONS .....9**  
**2.19 AERODROME INFORMATION .....9**  
**2.20 FLIGHT RECORDERS .....9**  
**2.21 WRECKAGE AND IMPACT INFORMATION .....9**  
**2.22 FIRE .....9**  
**2.23 SURVIVAL ASPECTS .....9**  
**2.24 TEST AND RESEARCH .....10**  
**2.25 ORGANIZATIONAL AND MANAGEMENT INFORMATION.....10**  
**2.26 ADDITIONAL INFORMATION.....10**  
**2.27 USEFUL OR EFFECTIVE INVESTIGATION TECHNIQUES.....10**  
**2.28 PHOTOGRAPHY INFORMATION.....11**  
**2.29 SEARCH AND RESCUE.....11**  
**2.30 LUGGAGE AND CARGO.....11**  
**2.31 APPRECIATION OF THE EMERGENCY LANDING AREA.....11**

**PART 3 - EVENT ANALYSIS**

**3.1 ANALYSIS OF INFORMATION.....12-14**

**PART 4**

**4.1 CONCLUSIONS..... 15**  
**4.2 CONTRIBUTING FACTORS ..... 15**

**PART 5**

**5.1 PROBABLE CAUSE .....16**  
**5.2 SAFETY RECOMMENDATIONS.....16-17**

**PART 6 - ANNEXES**

**6.1 LIST OF ANNEXES AND ANNEXES.....17-18**



### 0.3 Glossary

#### **Aircraft.**

Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

#### **Probable Causes.**

Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident. The identification of causes does not imply the assignment of fault or the determination of administrative, civil or criminal liability.

**Incident.** An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

#### **Investigation:**

A process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations.

#### **Investigator-in-charge:**

A person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation.

#### **Operator:**

A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

#### **Preliminary Report:**

The communication used for the prompt dissemination of data obtained during the early stages of the investigation.

#### **Safety recommendation:**

A proposal of an accident investigation authority based on information derived from an investigation, made with the intention of preventing accidents or incidents and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident. In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies.

### 0.4 ABBREVIATIONS

#### **A**

AGL Above ground level

ATC Air Traffic Control

#### **B**

BCAR Belize Civil Aviation Regulation

BDCA Belize Department of Civil Aviation

#### **C**

C of A Certificate of airworthiness

CPL Commercial Pilot License

#### **D**

#### **E**

E East

#### **F**

#### **G**

GPS Global positioning system

#### **H**

Hr(s) Hour(s)

#### **I**

IAS Indicated airspeed

IIC Investigator-in-charge

#### **K**

kt Knot(s)

#### **L**

#### **M**

MET Meteorological

Meteorological services

min Minute(s)

#### **N**

N North

NM Nautical mile(s)

#### **O**

OPS Operations

#### **P**

PIC Pilot-in-command

P/N Part number

#### **Q**

#### **R**

RF Radio frequency

#### **S**

S South

S/N Serial number

#### **T**

TAF Terminal aerodrome forecast

TECHOPS Technical Operations

TMA Terminal control area

#### **U**

UTC Coordinated Universal Time

#### **V**

VFR Visual flight rules

VMC Visual meteorological conditions

VSI Vertical speed indicator



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**FINAL REPORT**  
**Aircraft Incident**  
**Registration marks N936AN**

**PART 1**

**1.1 FACTUAL INFORMATION:**

**Manufacturer:** Boeing  
**Mark:** N936AN  
**Model:** 737-823  
**Serial number:** 29532  
**Type Certificate:** FAA A16WE  
**Category:** Transport  
**Colors:** White and blue with American airline logo on tail section

**Airworthiness Certificate:**  
Airworthiness certificate valid: Yes  
Date of Issue: August 24<sup>th</sup> 2019  
Expiry: March 31<sup>st</sup> 2019

**Aircraft Insurance:**  
Company Insured: Yes  
Date of issue: TBC (operating as American airlines)  
Date of expiry: TBC (operating as American airlines)  
Coverage: TBC (operating as American airlines)  
Geographical Limits: TBC (operating as American airlines)

Place of Incident (site): Cruise (FL 200 – FL 300 feet AGL)

**Date of Incident:** 8 June, 2019

Coordinates of the location of the incident:  
Coordinates: Unknown (South of Merida)  
(20 Minutes after becoming airborne from MZBZ)

Elevation of incident site: Not applicable  
Approximate time of the incident: 1655 pm local (Approx.) 2155 Zulu  
Proprietor/Owner or Operator: See Annex 1 – FAA REGISTRY INFORMATION  
Persons on Board: 151 (One hundred and fifty one) passengers  
6 (Six) Crew  
Total persons: 157 (one hundred and fifty seven)

Phase of flight which the incident occurred: Cruise flight (Approximately 20 Minutes after take-off from MZBZ) South of Merida, Mexico



## **PART 2 – EVENT SYNOPSIS AND FACTUAL INFORMATION**

### **2.1 SYNOPSIS:**

On June 8th, Flight AA268 departed Belize (MZBZ) at approximately 3:35 pm local time 1535 hrs UTC en-route to Dallas Texas (DFW airport) with 151 passengers and 6 crew on board. After 20 minutes in flight at about FL 200 or 20,000 feet, the Captain reported that he was returning to Belize because there was a strong vibration in the “nose” of the aircraft and requested that maintenance meet the flight. Unable to land overweight, the captain flew in a holding pattern for 1 hour and 41 minutes to burn off fuel prior to landing. PGIA CFR was notified of the event and was activated and stood ready to assist the aircraft with any issues that occurred during landing. At 5:26 pm local (1726 hrs UTC) the flight AA268 landed safely in Belize and was met by the Station manager, Prem-Air maintenance personnel and the American airlines TEC-OPS who were contacted for assistance.

Prem-Air personnel under the guidance of AA TEC-OPS conducted an aircraft inspection to confirm if there was any damages. There were no injuries reported during this event. The aircraft after landing returned to the parking stand where the maintenance provider inspected the nose section and saw that the “P19 External power panel” which houses the mic jack which is used to communicate with the push back truck and the cockpit, was left open and this was what was causing the vibration.

### **2.2 HISTORY OF FLIGHT:**

On June 8th, Flight AA268 arrived on time at MZBZ and completed the normal turn around in accordance with its regular schedule. At 3:35 pm local time 1535 UTC, Flight AA268 departed MZBZ with 151 passengers and 6 crew en route to DFW (Dallas Fort Worth, Texas). Approximately 20 minutes into the flight, the PIC reported to American airlines station manager in Belize that he would be returning to MZBZ due to excessive vibration being felt in the nose cone. He was not aware what was the cause of the vibration and decided to return to land with the safety of passengers being primary focus. The aircraft returned to MZBZ and flew overhead for approximately 1 hour and a half in order to burn off excess fuel to meet its Minimum allowable landing weight. During this time the PGIA CFR were put on notice to respond to any emergency. At 5:26 pm local (1726 hrs UTC) the flight AA268 landed safely in Belize and was met by the Station manager, Prem-Air maintenance personnel and the American airlines TEC-OPS who were contacted for assistance. Prem-Air personnel under the guidance of AA TEC-OPS conducted an aircraft inspection to confirm if there was any damages.

After landing the aircraft returned to the parking stand where the maintenance provider inspected the nose section and saw that the P19 “External power panel” was open which it was believed was the cause of the vibration. The aircraft was inspected and all required maintenance procedures for aircraft with an open panel were completed. The aircraft was subsequently refueled and it then departed MZBZ for a second time. The aircraft departed and arrived safely at its destination.

### **2.3 PLACE OF IMPACT:**

The aircraft did not make impact but landed safely at PGIA (MZBZ).



**2.4 INJURY TO PERSONS:**

INJURY	CREW	Passengers	Others	Total
Fatal	0	0	0	<b>0</b>
Serious	0	0	0	<b>0</b>
minor	0	0	0	0
None	6	151	0	157
<b>TOTAL</b>	<b>6</b>	<b>151</b>	<b>0</b>	<b>157</b>

**2.5 Damage to aircraft:**

The aircraft suffered no significant structural damage during this incident. The P19 External power panel was secured upon its return to MZBZ and no damages were seen to the panel.

**2.6 Other Damages:**

There were no other damages caused during this incident, there was no damage to persons on the ground or damage neither to the aerodrome, facility nor to any infrastructure within the aerodrome.

**2.7 PERSONAL INFORMATION OF THE PILOT:**

There was no significant safety concern nor issue regarding the flight crew nor their operation of the aircraft and as such there was no need to be investigate the pilot’s personal information or his flying history prior to this event.

**2.8 PERSONAL INFORMATION OF THE CO-PILOT:**

There was no significant safety concern nor issue regarding the flight crew nor their operation of the aircraft and as such there was no need to be investigate the co-pilot’s personal information or his flying history prior to this event.

**2.9 AIRCRAFT INFORMATION:**

AA headquarters maintains registration and airworthiness information and in the interest of the scope of the investigation it was not needed. A standard check of the FAA registry reveals the aircraft was issued a certificate of registration on the 16<sup>th</sup> June 2000 and this certificate expires on 31<sup>st</sup> July 2020. A copy of the FAA registration certificate is attached at Annex 1.

**2.10 HISTORY OF THE AIRCRAFT:** Not applicable

**2.11 MOTOR AND PROPS:** Engine Model: CFM56 SERIES

**2.12 FUEL:** Aircraft uses Jet A fuel however there was no significant issue with fuel during this incident.

**2.13 AUXILLARY EQUIPMENT:** Not applicable.





- 2.14 DEFECTS:** A check of the aircraft by Prem-air reveals that there were no “KNOWN DEFECTS”.
- 2.15 WEIGHT AND BALANCE:** This was done in accordance with AA procedures and in the interest of the scope of the investigation it was not necessary to obtain this information.
- 2.16 METEOROLOGICAL INFORMATION:**  
The meteorological report for PGIA (MZBZ) for the 8<sup>th</sup> June, 2019 is attached at Annex 2 – Meteorological report.
- 2.17 NAVIGATIONAL AIDS:** This Aircraft was equipped with GPS/VOR/ILS to aid in navigation.
- 2.18 COMMUNICATIONS:** The aircraft is equipped with VHF Transreceiver. The airport is equipped with VHF for pilot controller communication which was functioning at the time of incident. Communications with the air traffic controlling agency were done on 118.0 Mhz (tower) and 121.0 Mhz (Belize Radar/ground control). Other communication was done as directed by Belize Radar control after the aircraft had left Belize airspace.
- 2.19 AERODROME INFORMATION:**  
This incident occurred whilst the aircraft was in cruise between FL 200 and FL 300. The aircraft departed and landed back at the Phillip Goldson International airport (PGIA) which has an identifier MZBZ. The details of the aerodrome are available at the following link: [http://www.cocesna.org/aipca/AIPMZ/AIP\\_1800/2018-04-26-NON%20AIRAC/html/index-en-EN.html](http://www.cocesna.org/aipca/AIPMZ/AIP_1800/2018-04-26-NON%20AIRAC/html/index-en-EN.html).
- 2.20 Lighting:**  
Not applicable as the incident occurred during daytime.
- 2.21 FLIGHT RECORDERS:**  
Flight recorders were installed on the aircraft as per FARs requirement for this type of aircraft by regulation.
- 2.22 THE REMAINS OF THE AIRCRAFT AND THE IMPACT INFORMATION:**  
There was no wreckage as the aircraft was not damaged during this event.
- 2.23 FIRES:** There was no evidence of fire.
- 2.24 SURVIVAL ASPECTS:** All passengers survived this incident as the flight crew flew back to MZBZ and flew overhead for an hour and a half to burn off excess fuel. After enough fuel was burnt off to allow a safe landing within the aircraft’s limit, the aircraft landed at MZBZ. This incident was survivable.
- 2.25 TEST AND RESEARCH:** The accident investigation unit relied upon the witness interviews along with the collection of evidence of training and ramp procedures during the investigation. The use of IATA Ground operations generic manual was also used to confirm the correct procedures that should have been done for push back and disconnection of the P19 External power panel.
- 2.26 TEST RESEARCH OF TURBINE COMPRESSOR:** Not applicable



## 2.27 ORGANIZATIONAL AND MANAGEMENT INFORMATION:

### **Aerodispatch Belize**

Aero dispatch Belize is a service provider that provides passenger services, ramp handling and cargo handling services exclusively at the PGIA. They offer ground services for both private and commercial aircraft arriving and departing at the PGIA. Aero Dispatch provides ground support to American Airlines, Avianca, Copa Airlines, Delta Airlines, Southwest Airlines, United Airlines, and WestJet on a daily basis and services for private aircraft are offered by request. Its daily work is focused on commercial aircraft however since its establishment in 1961, Aero Dispatch Services has been providing complete ground handling services to private, commercial, cargo, military, diplomatic, and medical aircraft for Belize. The breakdown of manpower compared to flights attended for AA are as follows:

#### **Peak periods**

Daily – 3 a/c handled = 18 persons  
Saturday – 5 a/c handled = 30 persons

Personnel available = 60 ramp agents

#### **Normal periods**

Daily – 1 a/c handled = 6  
Saturday – 3 a/c handled = 18

Personnel available = 50 ramp agents

#### **\*\*Average Manpower required per A/C – 6**

Aerodispatch employees are subjected to initial training upon employment and subsequently they partake in monthly and yearly trainings offered by the airlines that they service. Aerodispatch training is dependent on the various airlines who provide periodic training of various aircraft types: class room and visual aided (computer).

**American airlines:** American airlines Belize is the local representative of the worldwide carrier American airlines. It operates daily flights into MZBZ (PGIA) using mostly the 737 (800 series) due to the environment and airport size. The company has a country manager and station manager who supervises the daily operations into PGIA. American airlines contracts the services of Aerodispatch to provide complete ground handling of its aircraft. American airlines also provides periodic training for Aerodispatch ground handlers on AA ground handling procedures and training on different types of aircraft as well as dangerous goods training.

### **Prem- Air Belize**

PremAir Belize is an aircraft maintenance provider which operates from the PGIA. It provides maintenance upon request for large commercial carriers. PremAir has certified A&P mechanics who provide line maintenance as well as other maintenance services upon request.

## 2.28 USEFUL AND EFFECTIVE RESEARCH TECHNIQUES:

The standard investigation techniques including photo taking, interviews and fact finding such as review of training, management and evaluation of procedures were used during this investigation.



**2.29 PHOTOGRAPHY INFORMATION:** All photographs are attached at the various annexes attached.

**2.30 SEARCH AND RESCUE EQUIPMENT:** This aircraft was equipped with the 406 type emergency locator transmitter (ELT).

**2.31 LUGGAGE/CARGO:**

All luggage and cargo was secured and was not tampered with upon the aircraft landing and departing for a second time from MZBZ.

**2.32 APPRECIATION OF THE EMERGENCY LANDING AREA:**

The aircraft was safely landed on the runway 07/25 at MZB after the pilot did a circle of 1 hour and 41 minutes to burn off fuel and to be in the range of the MLW (Minimum landing weight).



## **PART 3 – ANALYSIS OF INFORMATION FOUND DURING INVESTIGATION**

### **3.1 ANALYSIS:**

An analysis of the event has revealed that there was a failure to ensure that the P19 External power panel was secured and locked prior to the departure of N936AN on the 8<sup>th</sup> June 2019. The aircraft suffered severe vibration climbing through FL200 and FL300 when the PIC decided it was best return to PGIA to land to address the vibrations he was feeling from the nose cone. A look at the evidence shows that there is a lack of training on the part of some new and recent hires including ground handlers who work for Aerodispatch. There is a combined responsibility to ensure that training is done since Aerodispatch is dependent on the operator (airlines) to provide training on the different types of aircraft and SOP's for each aircraft. It was noted that there were deficiencies in the organization stemming from lack of training due to non-availability of its own trainer and persons being hired who are not being immediately provided with Ramp 1500 training but who carry out ramp functions. It could not be established due to the lack of evidence showing training on the type of aircraft by the personnel who was directly responsible for closing the panel, and combined with the fact that the employee was not made available due to his release from the company; that the left wingwalker took all reasonable measures to ensure that the P19 External power panel was closed and secure prior to giving the PIC the thumbs up for his departure.

The analysis of the findings during the event has been broken down into 3 areas: 1. Pre-existing (latent) conditions 2. Organizational findings 3. Event findings.

#### **3.1.1 Pre-existing conditions**

- a. The ramp 1500 training is the American Airline training which includes procedures for pushback and wing walking of the aircraft operated in Belize by AA.
- b. Only 1 of the 3 Aerodispatch employees who made up the ground handling crew for this aircraft had received the required AA Ramp 1500 training but was not current. This employee was serving the function of pushback driver at the time of the event and received his initial 1500 training September 7<sup>th</sup> 2017. In 2018 the employee stopped working at Aerodispatch and as such did not receive any recurrent training for the year 2018. In 2019 the employee was rehired by Aerodispatch but did not received any recurrent training prior to resuming pushback duties. The other two employees who formed the ground crew did not receive the Ramp 1500 training however they were performing the functions that they should have trained and documented to carry out.
- c. AA trainer conducts classroom training for Aerodispatch when her scheduling allows, however this does not always coincide with the availability of Aerodispatch employees or at times the amount of personnel that need training does not meet the AA requirement to conduct such training.
- d. Aerodispatch has requested a train the trainer course to be done which would allow one of its employees to conduct in house training and certification. The request for the train the trainer was approved and the training had previously been given to one Aerodispatch employee who should have conducted training, however he is not currently performing this function. This employee also has exceeded the training validity period and requires recurrent training in order to be qualified to perform this function. As such Aerodispatch does not have the availability of a company trainer and is dependent on AA trainer scheduling to provide classroom training for its new and recent hires.



### **3.1.2. Organizational findings**

**a.** Aerodispatch provides two types of ground handling service to the different airlines operating in Belize. The first is full service where the company handles not only ground services but it provides boarding and baggage handling for the airline. The second type is only ground handling service where Aerodispatch handles aircraft parking, pushback and limited baggage services but does not handling boarding or ticketing services. AA is provided with the second type of service where AA maintains its ticketing, passenger handling and limited baggage handling.

**b.** After the event, the employee who was providing the function in question (left wingwalker) was terminated shortly after the event for reasons that were stated to be unrelated to this occurrence. As such he was not available for interview to confirm whether or not he stated to anyone that he confirmed he had closed the panel.

**c.** Aerodispatch does not maintain training files for employees on aircraft that they only provide ground servicing such as American airlines, the records are kept at the operator and the service provider relies on the operator to inform the employees when he needs to do a training.

### **3.1.3. Event findings**

**a.** In accordance with AA procedures it was the sole responsibility of the left wing walker to remove the pushback truck pin and to detach the headset and close the P19 external power panel. Upon landing it was discovered that the external power panel was open.

**b.** When the aircraft returned an the inspection was done to confirm whether the panel was working properly, this was not done in the presence of the Aerodispatch operations manager nor ground supervisor but only in the presence of the operator and maintenance provider.

**c.** An inspection of the external power panel was done by Prem-Air maintenance in coordination with AA TEC-OPS whom confirmed that there was no damage nor defects to the external power panel on N936AN. The part was confirmed to be working properly, however it was reported that personnel from PremAir who did the second closure of the panel had to ensure it was closed by tapping on the panel with a hand tool, which is not equipment carried usually by the pushback truck drivers nor the wing walkers. On the second attempt the panel was closed, the PremAir maintenance engineer rubbed his hand over the panel, closed it and then tapped on it with a hand tool and this confirmed that the part was functioning well at that time. The interview with the other wingwalker and pushback truck driver could not ascertain whether the left wing walker had in fact closed, checked and rechecked the external power panel door was closed, they could only see from their vantage point that the employee after removing the pin spent a couple seconds doing what they thought was closing the panel and they also confirmed that they could not have seen whether the left wingwalker tapped the panel with a hand tool or not. It was asked if they saw him carrying any such tool at any time and their response was no.

**d.** When the external power panel was closed for a second time and the pins were pressed in, the Prem-Air employee had to tap the cover with a tool to confirm it was closed, normally tools such as these are not carried by Aerodispatch personnel and they improvised by running their hand along the seam and tapping with their hand. This is not a part of the regular operation of the external power panel as it requires 3 pins that when pushed in should push out the locking pin and this confirms that the pin is locked when the other side is seen to be flush with the aircraft skin.



e. Subsequent to this event on 2 instances the same type of aircraft operated by different operators had similar issues where the pins were not locking properly and the secondary part which should have been flush with the aircraft skin was not. In both instances the PremAir mechanic was required to use a hand tool to close the panel in a manner other than the normal operation. In one instance the mechanic kept knocking the panel after the pin was supposedly locked and the panel would become open when he tapped on it. In another instance a member of the flight crew came down to observe why was it that the ground crew kept knocking on the side of the aircraft. This member of the flight crew was informed that the panel was not closing flush with the skin and would not lock properly. The flight crew member did an alternation where he pressed in one pin and when the other popped out and was not flush, he then used his hand to pull out the pin in order for it to become secure, this shows that the panel was not being secured using the proper manufacturer/operations procedure. On June 21<sup>st</sup> another instance of another panel not being closed properly when it landed in Belize was reported. This time it was a Delta aircraft which landed with the water servicing panel open. This shows increase in occurrences in the same month.

f. There was no recording of this event available from the Airport manager. It was asked whether the operator or any of the service providers were able to gather video recording of the event to which they all responded no and that they believe there is no camera facing the runway or that can see as far as the white line used to demarcate the area where aircraft are pushed back and where persons are allowed to walk.



## **PART 4.0: CONCLUSIONS AND CONTRIBUTING FACTORS**

### **4.1 CONCLUSION:**

The aircraft departed from MZBZ with the P19 External panel not fully secure which caused extreme vibration being felt in the nose of the aircraft due to the panel being pushed against back and forth by the relative wind hitting the front of the aircraft. The panel was not properly closed during the pushback and disconnection process due to the employee not having appropriate training and there was no confirmation of the action done by the employee because he was terminated.

### **4.2 CONTRIBUTING FACTORS:**

1. The left wingwalker did not complete the required AA Ramp 1500 training, as a result it cannot be stated that he was aware of the procedures to be carried out during pushback and departure of the aircraft in accordance with the operator's SOP's which include rubbing his hands along the surface to ensure the panel is flush with the skin of the aircraft nor can it be confirmed that he tapped on the panel twice to confirm it didn't come open. These were practices that are taught in the Ramp 1500 training. It should also be stated that the employee's termination shortly after the event does call into consideration organizational shortfalls in the area of just culture by allowing the employee to be subjected to investigation and interviews prior to termination.

2. It was the sole responsibility of the left wing walker to remove the pushback truck pin and to detach the headset and close the P19 external power panel. The left wing walker was responsible for the proper closure of the panel and he did not take steps to ensure that all pins were locked and connected. He also did not report any problems with the operation of the P19 external panel.

3. AA and Aerodispach shall resolve the issue of provision of train the trainer training with the utmost urgency and priority and in the interim until the train the trainer session is scheduled AA shall provide Ramp 1500 to the Aerodispach employees such as the recent and new hires who carry out pushback and wingwalking functions and do not have the training.

4. Subsequent to this event on 2 instances the same type of aircraft operated by different operators had similar issues where the locking pins were not locking properly and the secondary part which should have been flush with the aircraft skin was not. In both instances the PremAir mechanic was required to use a hand tool to close the panel in a manner other than the normal operation. There has been an increase in the occurrence of P19 external panel not closing in accordance with manufacturers but requiring additional procedures. This requires monitoring by the BDCA airworthiness section to determine if panels should be subjected to inspection.



## **PART 5: PROBABLE CAUSE AND SAFETY RECOMMENDATIONS**

**5.1 PROBABLE CAUSE.** The probable cause of this incident is a failure to properly carry out all wingwalking procedures in accordance with established air operator training guidelines. This is based on the fact that it was confirmed that the left wingwalker did not complete the required training which would have taught him how to confirm that the panel was locked either by running his hand along the seams and tapping the panel to ensure it did not reopen, it cannot be reasonably established that the wingwalker completed all reasonable steps (including tapping the panel to see if it was loose) in accordance with the ramp 1500 training to ensure that the P19 external panel was locked and secure after the mic jack was disconnected because his service was terminated and his recollection of the event was never obtained. The left wingwalker did not report that the panel was giving trouble to close nor did he inform the ramp supervisor that the panel was not closing well and the aircraft departed with the panel partially closed and unsecure.

### **5.2 SAFETY RECOMMENDATIONS:**

#### **1A. RECCOMENDATION: TRAINING AGREEMENT PRIORITIZATION.**

**ENTITY REQUIRED TO ADDRESS: AMERICAN AIRLINES AND AERODISPATCH BELIZE.** An agreement shall be reached between AA and Aerodispach to address the issue of training new and recent hire employees in the 1500 ramp training. Those employees who have been hired but have not yet done the ramp training shall not be allowed to carry out push back and wing walking duties until they have received the Ramp 1500 training. A time period of no more than 1 month shall be established to ensure that either AA trains a trainer designated by Aerodispach or AA provides the Ramp 1500 for new and recent hires who require this type of training.

**1B. RECCOMENDATION:** AA and Aerodispach shall address the issue of training the trainer and this shall be done without delay. AA shall provide a person to provide train the trainer training to a designated Aerodispach employee who is appropriately qualified and is given the appropriate level of decision making and enforcement that allows such a person to inform persons of training requirements and whom will be given the power to remove personnel from the ramp when their training has expired.

#### **1C. RECCOMENDATION: RETENTION OF ALL EMPLOYEE TRAINING RECORDS.**

**ENTITY REQUIRED TO ADDRESS: AERODISPATCH.**

Aerodispach management shall immediately retain copies of all employee training and produce training files which are to be a part of the employee's personal file and company file. Aerodispach shall produce its own system where employees training are tracked and Aerodispach shall be accountable for informing the employees of training that is due and the company shall give time for the employee to carry out his required training.

#### **2. RECCOMENDATION: TRAINING RECORD CHECKS**

**ENTITIES REQUIRED TO ADDRESS: BDCA AND AERODISPATCH**

The BDCA shall confirm via records check of all Aerodispach employees which employees have the required trainings and what training is lacking and Aerodispach shall be informed that persons who do not have the appropriate training to carry out their duties and functions shall not be allowed to do so with immediate effect.





**3. RECCOMENDATION MEDIUM TO LONG TERM: SERVICE PROVIDERS TO BE SUBJECTED TO CERTIFICATION PROCESS.**

**ENTITIES REQUIRED TO ADDRESS: BDCA AND AERODISPATCH/SERVICE PROVIDERS.**

As service providers Aerodispach shall be subjected to an abbreviated certification process which shall ensure that the provider carries out its functions in accordance with the BCAR's and BDCA shall ensure that Aerodispach and all service providers submit all required manuals for approval such as their company General Operations Manual and training manual and these manuals shall include all aspects which are required by the BCAR's. The service provider shall show that its operation is in accordance with the procedures established in its manuals. The requirements to submit to an abbreviated certification process shall be mandatory for all service providers.

**4. RECCOMENDATION MEDIUM TERM: SURVEILLANCE OF AIR SIDE/RAMP**

**ENTITIES REQUIRED TO ADDRESS: PGIA AIRPORT MANAGEMENT**

Consideration should be given as to the requirement to have camera system to be focused on the ramp and the entire air side to give the ability for video review of events that occur on these parts of the airport.

**5. RECCOMENDATION: PRESENCE OF SERVICE PROVIDER/OPERATOR UPON AIRCRAFT RETURN TO STATION.**

**ENTITIES REQUIRED TO ADDRESS: SERVICE PROVIDER AND OPERATOR**

Management of service providers such as Aerodispach shall ensure that provisions are put in place to ensure that at least ramp supervisors or the operations manager are present to witness any aircraft that returns to the station in order to ensure that the issue that rendered the aircraft needing to return is witnessed by the service provider, the maintenance provider and the operator since both the employees of the service provider and the operator will always be one of the last persons to have contact with the aircraft. This is to ensure that the service provider/operator protects itself and records details of the event that occur and if necessary they shall report events through the BDCA mandatory or volunteer reporting systems.

**6. RECCOMENDATION: REPORTING OF PANELS NOT CLOSING PROPERLY.**

**ENTITIES REQUIRED TO ADDRESS: AERODISPATCH**

Any ramp/ground crew who encounters any panels which require procedures other than normal procedures to close panels shall report the panel issue to the ramp supervisor and the aircraft flight crew. The Aerodispach ramp/ground supervisor or Operations manager shall ensure that maintenance providers are called to check the panel prior to release of the aircraft and the service provider shall also report the issue to the BDCA using the mandatory occurrence reporting system. Ground servicing/handling agents shall not be required to conduct any procedure such as tapping the outside of the panel with any tool to ensure it is closed. If there is difficulty operating the locking mechanism, the operator and the maintenance provider are to be immediately informed of the issue by the service provider and the aircraft shall not be released until the maintenance provider confirms the panel is properly closed and secure.

**7. RECCOMENDATION: RAMP SURVEILLANCE OF INCREASE PANEL NON CLOSING EVENTS.**

**ENTITIES REQUIRED TO ADDRESS: BDCA**

The BDCA inspectorate shall take note of the increase in abnormal panel operation or non-closure of panel reports. BDCA shall conduct ramp surveillance on this specific type of aircraft and record instances of panel non closure or closure difficulty for a period of 2 months. If the situation continues to repeat itself the BDCA shall take measures it sees appropriate to stop the instances of panels arriving open, leaving PGIA open or returning to land open.



**PART 6 LIST OF ANNEXES:**

- ANNEX 1 – FAA REGISTRY INFORMATION
- ANNEX 2 – MET REPORT FOR 8 JUNE 2019

**ANNEX 1: FAA REGISTRY INFORMATION – N936AN**

Aircraft Description			
Serial Number	29532	Status	Valid
Manufacturer Name	BOEING	Certificate Issue Date	06/16/2000
Model	737-823	Expiration Date	07/31/2020
Type Aircraft	Fixed Wing Multi-Engine	Type Engine	Turbo-fan
Pending Number Change	None	Dealer	No
Date Change Authorized	None	Mode S Code (base 8 / oct)	53176000
MFR Year	2000	Mode S Code (base 16 / hex)	ACFC00
Type Registration	Corporation	Fractional Owner	NO

Registered Owner			
Name	AMERICAN AIRLINES INC		
Street	4333 AMON CARTER BLVD		
	MD 5569		
City	FORT WORTH	State	TEXAS
County	TARRANT	Zip Code	76155
Country	UNITED STATES		



Airworthiness			
Engine Manufacturer	CFM INTL.	Classification	Standard
Engine Model	CFM56 SERIES	Category	Transport
A/W Date	06/15/2000	Exception Code	Yes

The information contained in this record should be the most current Airworthiness information available in the historical aircraft record. However, this data alone does not provide the basis for a determination regarding the airworthiness of an aircraft or the current aircraft configuration. For specific information, you may request a copy of the aircraft record at <http://aircraft.faa.gov/e.gov/ND/>

Other Owner Names			



## ANNEX 2 – METEOROLOGICAL REPORT FOR 8<sup>th</sup> June, 2019 at MZBZ (PGIA)



**WEATHER ANALYSIS & FORECASTING**

National Meteorological Service of Belize  
Philip Goldson International Airport  
PO Box 717  
Belize City, BELIZE

Tel: 501-225-2011, 2012, 2054  
Fax: 501-225-2101  
Web: [www.hydroset.gov.bz](http://www.hydroset.gov.bz)  
Email: [hydro@hydroset.gov.bz](mailto:hydro@hydroset.gov.bz)

27<sup>th</sup> June 2019

Ref: Met/Gen/43/01/19(15)

Mr. Shaun Young  
Aircraft Accident Investigator  
Accident Investigation Unit  
Department of Civil Aviation  
Philip Goldson Int'l Airport


Re: Weather conditions at the PGIA on afternoon of 8<sup>th</sup> June 2019

Dear Mr. Young,

The weather was mainly fair and dry at the Philip Goldson International Airport (PGIA) during the afternoon of Saturday 8<sup>th</sup> June 2019. Below are the observations (METAR) taken at the PGIA on that day from 12:00 noon (08:1800z) to 6:00pm (09:0000z):

METAR MZBZ 081800Z 08007KT 9999 SCT024 32/27 A2982 Q1009 NOSIG=  
METAR MZBZ 081900Z 07008KT 9999 SCT024 32/27 A2980 Q1009 NOSIG=  
METAR MZBZ 082000Z 08009KT 9999 FEW024 32/27 A2978 Q1008 NOSIG=  
METAR MZBZ 082100Z 06009KT 9999 SCT023 32/27 A2977 Q1008 NOSIG=  
METAR MZBZ 082200Z 08008KT 9999 FEW022 31/27 A2976 Q1007 NOSIG=  
METAR MZBZ 082300Z 07009KT 9999 BKN021 31/27 A2977 Q1008 NOSIG  
RMK DIST CB TOP-SW=  
METAR MZBZ 090000Z 08007KT 9999 SCT020 30/27 A2978 Q1008 NOSIG  
RMK DIST CB TOP-SW=

I hope that this information is helpful to you.

Best regards,  
  
Derrick Rudon  
Meteorologist

**END**