



PRELIMINARY FACTUAL REPORT

AIC 24-2002

Air Niugini Limited

P2-PXB

B737-800 aircraft

Hazardous material, mercury in aircraft cargo

Jacksons International Airport, Port Moresby

Papua New Guinea

23 July 2024

About the AIC

The Accident Investigation Commission (AIC) is an independent statutory agency within Papua New Guinea (PNG). The AIC is governed by a Commission and is entirely separate from the judiciary, transport regulators, policy makers and service providers. The AIC's function is to improve safety and public confidence in the aviation mode of transport through excellence in: independent investigation of aviation accidents and other safety occurrences within the aviation system; safety data recording and analysis; and fostering safety awareness, knowledge and action.

The AIC is responsible for investigating accidents and other transport safety matters involving civil aviation in PNG, as well as participating in overseas investigations involving PNG registered aircraft.

A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The AIC performs its functions in accordance with the provisions of the *PNG Civil Aviation Act 2000 (As Amended)*, and the *Commissions of Inquiry Act 1951*, and in accordance with *Annex 13* to the *Convention on International Civil Aviation*.

The objective of a safety investigation is to identify and reduce safety-related risk. AIC investigations determine and communicate the safety factors related to the transport safety matter being investigated.

On 8 August 2024, at 12:04 local time (02:04 UTC), a representative of CASA PNG notified the AIC via telephone call about a hazardous material spillage incident that occurred on 23 July 2024, involving a B737-800 aircraft, registered P2-PXB, operated by Air Niugini Limited, at Jacksons International Airport, Port Moresby, Papua New Guinea. The AIC immediately commenced an investigation. As part of the initial actions, a team of investigators were dispatched to conduct onsite investigation.

The *Preliminary Serious Incident Investigation Report* was produced by the AIC, PO Box 1709, Boroko 111, NCD, Papua New Guinea. It is approved for dissemination by the Commission in accordance with *Para 7.1* of *ICAO Annex 13*. The report is published on the AIC website: www.aic.gov.pg

The report is based on the investigation carried out by the AIC under the Papua New Guinea *Civil Aviation Act 2000 (As Amended)*, and *chapter 31* of the *Commissions of Inquiry Act, Annex 13* to the *Convention on International Civil Aviation*, and *PNG AIC Policy and Procedures Manual*. It contains factual information. Analysis of these information, findings and contributing (causal) factors, other factors, safety actions, and safety recommendations are reserved for the *Final Report*.

The sole objective of the investigation and the *Preliminary Report* is the AIC's obligation to the *Convention on International Aviation* and in accordance with *ICAO Annex 13*, and thereby promote aviation safety (Reference: *ICAO Annex 13, Chapter 7*). Readers are advised that in accordance with Section 219 of the *Civil Aviation Act 2000 (As Amended)* and *Annex 13*, it is not the purpose of the Commission's aircraft accident investigation to apportion blame or liability. Facts based statements in the report should not be interpreted as apportioning blame. Consequently, AIC reports are confined to matters of safety significance and may be misleading if used for any other purpose.



Maryanne J Wal

Chief Commissioner

22 August 2024

Occurrence Details

On 23 July 2024, at about 12:15 local time (02:15 UTC¹), a B737-800 aircraft, registered P2-PXB, operated by Air Niugini Limited sustained spillage of a hazardous material, mercury in its cargo compartment, during passenger boarding and cargo loading. The flight was scheduled to conduct a Commercial Air Transport Passenger and Cargo flight from Jacksons International Airport (Jacksons), Port Moresby to Nadzab Tomodachi International Airport (Nadzab Tomodachi), Morobe Province, Papua New Guinea.



Figure 1: P2-PXB aircraft at an isolation area

According to the operator's Internal Investigation Report, which was provided to the AIC, at about 12:15, during boarding of passengers and loading of cargo, a cargo handler observed leakage from one of the cargo packages that was located in the aircraft cargo compartment (*refer to Figure 1*). The cargo was immediately isolated.

Upon initial assessment of the leaked substance, by the engineers, it was identified to be mercury². As a result, the flight was cancelled, and all passengers and crew disembarked the aircraft.

The cargo was transported back to the operator's cargo facilities later that day.

The aircraft has been grounded and is currently undergoing cleaning and mercury vapour testing, to verify the level of contamination.

There were no reported injuries.

¹ The 24-hour clock, in Coordinated Universal Time (UTC), is used in this report to describe the local time as specific events occurred. Local time in the area of the serious incident, Papua New Guinea Time (Pacific/Port Moresby Time) is UTC + 10 hours.

² The United Nations classifies mercury as a Class 8, corrosive substance. Mercury poses a significant risk to aircraft metal structures which are made of aluminium. It is also recognized as a Class 6.1, toxic substance which has severe health effects if inhaled, ingested, or absorbed through the skin

AIC comment

The investigation is continuing and will include cargo operations, security screening process, ground handling, emergency response, training & competency, organisational aspects, safety oversight and other areas as applicable.

The investigation analysis and findings will be included in the *Final report*.

Safety Action

On 5 August 2024, Air Niugini Limited issued, through their website, a public notice on the conditions of carriage on mercury, a dangerous good, as a means to create awareness by displaying statutory warning along with details of the offences and punishments for mis-declaring dangerous goods.

Recommendations

At the time of the issue of this Preliminary Report, no *Safety Recommendation* had been made by the AIC.

General Details

| | | |
|--------------------------|--|------------------------------|
| Date and time: | 23 July 2024 12:15 local, 02:15 UTC | |
| Occurrence category: | Serious Incident | |
| Primary occurrence type: | Hazardous material, mercury spillage in cargo compartment during passenger boarding and cargo loading. | |
| Location: | Jacksons International Airport, Port Moresby, Papua New Guinea | |
| | Latitude: 9° 26' 25" S | Longitude: 147° 43' 13.07" E |

Aircraft Details

| | | |
|------------------------|---------------------|----------------|
| Aircraft manufacturer: | Boeing | |
| Aircraft model: | B737-800 | |
| Registration: | P2-PXB | |
| Serial number: | 40067 | |
| Year of manufacture: | 2014 | |
| Engine manufacturer: | Safran | |
| Operator: | Air Niugini Limited | |
| Type of operation: | Passenger and Cargo | |
| Persons on board: | Crew: 6 | Passengers: 61 |
| Serious Injuries: | Crew: 0 | Passengers: 0 |
| Minor Injuries: | Crew: 0 | Passengers: 0 |
| Nil Injuries | Crew: 6 | Passengers: 61 |
| Damage: | Unknown | |