



**PRELIMINARY REPORT**

**AIC 19 -1004**



**Air Sanga Limited**

**P2-ASZ**

**PAC 750XL**

**Landing Gear Collapse**

**Efogi Airstrip, Central Province**

**Papua New Guinea**

**7 October 2019**

---

## ABOUT THE AIC

---

The Papua New Guinea 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 *Annex 13* to the *Convention on International Civil Aviation*.

The object 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 7 October 2019, a PAC 750XL aircraft owned and operated by Air Sanga Limited landed at Efogi Airstrip, Central Province. During the landing, the nose landing gear collapsed. The AIC was informed by the Papua New Guinea Civil Aviation Safety Authority on 9 October 2019. Shortly after, the operator reported the occurrence to the AIC, and the AIC commenced an office investigation.

This *Preliminary Aircraft Accident Investigation Report* was produced by the AIC, PO Box 1709, Boroko 111, NCD, Papua New Guinea. It is publicly released by the Commission in accordance with *Para 7.1 of ICAO Annex 13*. The report is published on the AIC website: [www.pngaic.gov.pg](http://www.pngaic.gov.pg).

The report is based on the initial investigation carried out by the AIC in accordance with Papua New Guinea *Civil Aviation Act 2000 (as amended)*, *Chapter 31 of the Commissions of Inquiry Act*, *Annex 13* to the *Convention on International Civil Aviation*, and the *PNG AIC Investigation Policy and Procedures Manual*. It contains factual information. Analysis of that 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 Civil 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. Fact 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.



**Hubert Namani, LLB**

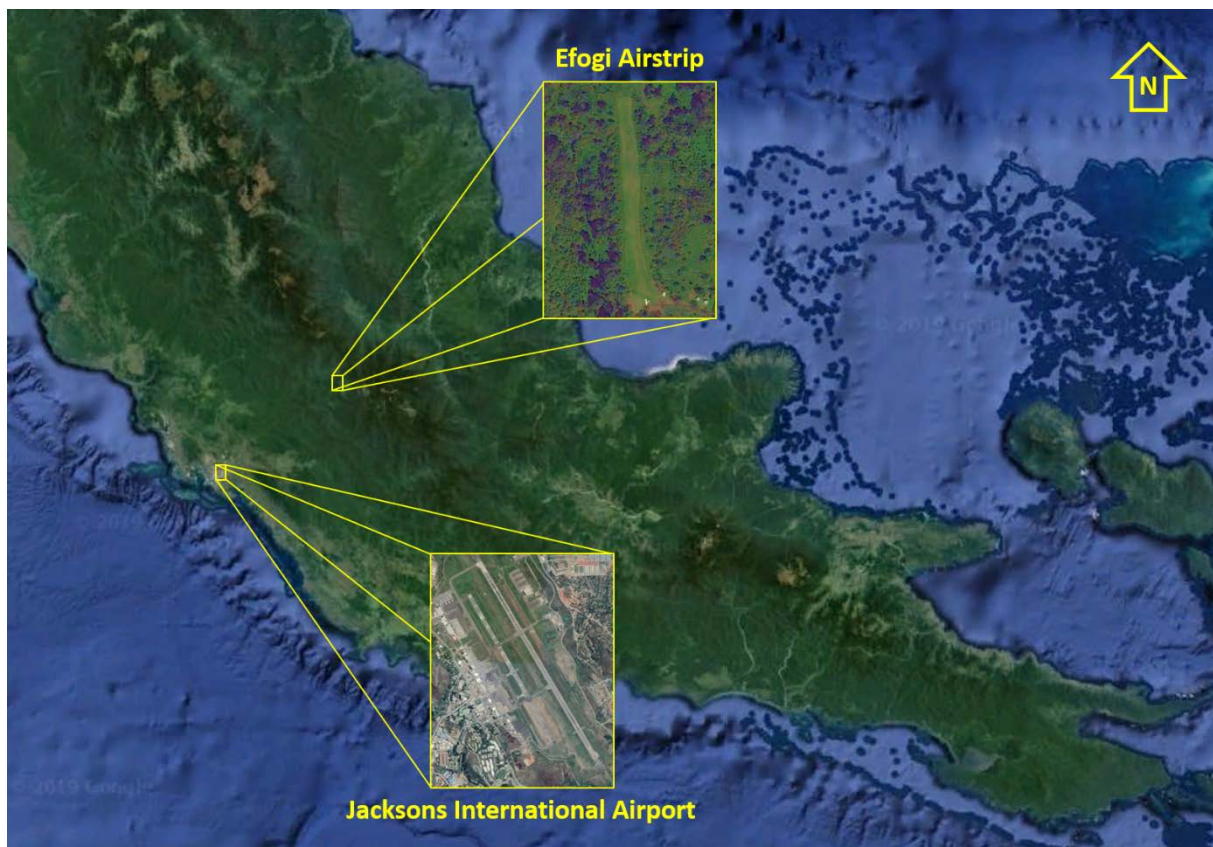
*Chief Commissioner*

24<sup>th</sup> October 2019

## PAC 750XL Nose landing gear collapse during landing

### Occurrence details

On 7 October, 2019, a PAC 750XL aircraft, registered P2-ASZ, owned and operated by Air Sanga Limited, departed from Jacksons International Airport, Port Moresby, to Efogi Airstrip, Central Province, Papua New Guinea. There were seven occupants; one pilot and six passengers.



**Figure 1: Map of the departure airport and destination airstrip.**

The pilot was conducting a VFR<sup>1</sup> charter flight and departed from Jacksons International Airport at 01:10 UTC<sup>2</sup> (11:10 local time), with an estimated time of arrival at Efogi Airstrip of 01:28. At 01:24, the pilot reported to the PNG Air Services Limited Flight Service Unit (FSU) that he was flying at a level not exceeding 7,000 ft AMSL<sup>3</sup>. At 01:27, the pilot notified the FSU that he was in the circuit area at Efogi, and would call again on the ground.

The pilot subsequently informed the AIC that during the landing at Efogi Airstrip the aircraft was affected by a tailwind gust, and the aircraft's nosewheel impacted the up slope of the airstrip. The nose landing gear, cargo pod, engine and propeller were substantially damaged. The seven occupants were uninjured.

<sup>1</sup> Visual Flight Rules: Those rules as prescribed by national authority for visual flight, with corresponding relax requirements for flight instruments (Source: *The Cambridge Aerospace Dictionary*)

<sup>2</sup> 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 accident, Papua New Guinea Time is UTC + 10 hours

<sup>3</sup> Above Mean Sea Level



**Figure 2: Impact nosewheel mark and the aircraft in its final position.**



**Figure 3: View of the damaged propeller and nosewheel zone.**



**Image 4: Insert shows engine reduction gearbox and exhaust zone.**



**Image 5: Nose landing gear assembly folded back into the cargo pod**

The pilot did not cancel SARWATCH on the ground after the accident. At 01:45 Port Moresby Air Traffic Services declared an INCERFA<sup>4</sup>, due to the unreported arrival of the aircraft at Efogi Airstrip. The INCERFA was cancelled at 03:34, after the operator confirmed that the aircraft was disabled on the airstrip.

### **AIC comment**

The investigation is continuing and will include an analysis of the aircraft, its engine, flight operational and maintenance records, organisational aspects and the safety management system.

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

### **Safety Action**

At the time of the issue of this Preliminary report, no safety action had been taken.

### **Recommendations**

At the time of the issue of this Preliminary report, no recommendations had been raised by the AIC.

---

<sup>4</sup> INCERFA: Phase of uncertainty (ICAO) (Source: *The Cambridge Aerospace Dictionary*)

## General Details

Date and time:	7 October 2019 ~ 01:30 UTC	
Occurrence class:	Accident	
Primary occurrence category:	Abnormal Runway Contact	
Location:	Efogi Airstrip, Central Province, Papua New Guinea	
	Latitude: 9° 9' 31.01" S	Longitude: 147° 39' 48.58" E

## Pilot details

Nationality:	Papua New Guinean
Licence type:	PNG CPL A
Licence number:	P2-0386
Total hours:	13123.8
Total hours in Command:	3286.2
Total hours on type:	984.3

## Aircraft Details

Aircraft manufacturer and model:	Pacific Aerospace 750XL
Registration:	P2-ASZ
Serial number:	179

## Type of operation, injury and damage details

Type of operation:	Charter	
Persons on board:	Crew: 1	Passengers: 6
Injuries:	Crew: Nil	Passengers: Nil
Damage	Nose landing gear, cargo pod, engine and propeller substantially damaged	

## Engine data

Engine type:	Turbo Propeller
Manufacturer:	Pratt and Whitney Canada
Model:	PT6A-34
Serial number:	PCE-RBO556
Total Time since new:	3668.3
Cycles since new:	6682

## Propeller data

Propeller manufacturer and model:	Hartzell B3TN
Serial number:	BUA-31309