



## PRELIMINARY REPORT

AIC 21-1001



**P2-ALP**

**Cessna TU206G**

**Nose landing gear collapsed during landing roll**

**Efogi Airstrip, Central Province**

**Papua New Guinea**

**16 February 2021**

## 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 *Annex 13* to the *Convention on International Civil Aviation*.

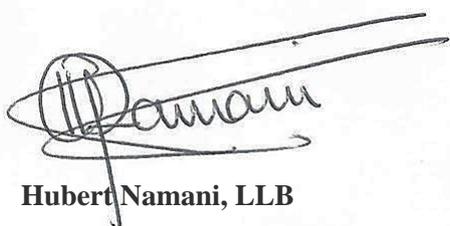
The object of a safety investigation is to identify and reduce safety-related risk. AIC investigations determine and communicate the safety factors related to the transport safety matter being investigated.

On 16 February 2021 at 12:57 local time (02:57 UTC), the AIC was notified by the Civil Aviation Safety Authority of Papua New Guinea (CASA PNG) via email, of an accident involving a Cessna TU206G aircraft, registered P2-ALP and operated by Airborne Logistics at Efogi Airstrip, Central Province. The AIC immediately commenced an investigation.

This Preliminary Aircraft Accident Investigation Report was produced by the AIC, and contains facts known to the AIC before the official release date. It is developed by the Commission in accordance with Para 7.1 of *ICAO Annex 13*. The report is also published on the AIC website: [www.aic.gov.pg](http://www.aic.gov.pg).

The report is based on the initial investigation activities 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*

18 March 2021

## Nose landing gear collapsed during landing roll

### Occurrence Details

On 16 February 2021, at 07:18 local time (21:18 UTC<sup>1</sup>), a Cessna TU206G aircraft, registered P2-ALP, operated by Airborne Logistics, was conducting a VFR<sup>2</sup> non-scheduled passenger flight from Jacksons International Airport, Port Moresby to Efogi Airstrip, Central Province and landed at its destination. During landing roll, the nose landing gear assembly collapsed.



Figure 1: Overview of the accident flight path and the site

There were 4 persons on board the aircraft; 2 pilots and 2 passengers. No injuries were reported.

The pilot in command (PIC) was pilot flying and was occupying the left seat. The co-pilot (CP) in the right seat as pilot monitoring and in a role of flight examiner as the flight would also serve to a purpose of finalising line checks for the PIC.

The flight crew was using an iPad to track the flight. According to the iPad<sup>3</sup> recorded data, the aircraft departed Jacksons International Airport at 06:55, climbed to 5,000 ft and turned towards the North East to intercept the VFR Route Golf at about 5 nm from Jacksons. During the interview, the crew stated that there was no significant weather along the route or in the Efogi area.

The recorded data also showed that the aircraft arrived in the Efogi circuit area at about 07:15, and tracked overhead the airstrip at about 1,300 ft AGL<sup>4</sup>. The crew stated that when positioned overhead, they visually assessed the airstrip without identifying conditions that could affect the aircraft during landing.

The aircraft continued onto downwind still maintaining 1,300 ft AGL, just 0.8 nm from the airstrip and tracked about 1.4 nm towards the North West, parallel to the airstrip (see Figure 2). The PIC then commenced a descent as it turned base.

<sup>1</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 serious incident, Papua New Guinea Time (Pacific/Port Moresby) is UTC + 10 hours.

<sup>2</sup> Visual Flight Rules - Those rules as prescribed by national authority for visual flight, with corresponding relaxed requirements for flight instruments (Source: The Cambridge Aerospace Dictionary). VFR requirements are established in PNG Civil Aviation Rule (CAR) Part 91

<sup>3</sup> OzRunways electronic flight bag (EFG) application was installed on the iPad

<sup>4</sup> Above Ground level (AGL). All altitude data obtained from the crew's iPad recorded data are referenced to the Efogi Airstrip threshold elevation of 3,800 ft

The aircraft extended past the final approach lateral profile for about 0.3nm while on the base leg. The PIC turned further left to intercept the final approach profile. The aircraft established on the final approach 0.5 nm from the threshold and at about 500 ft AGL.

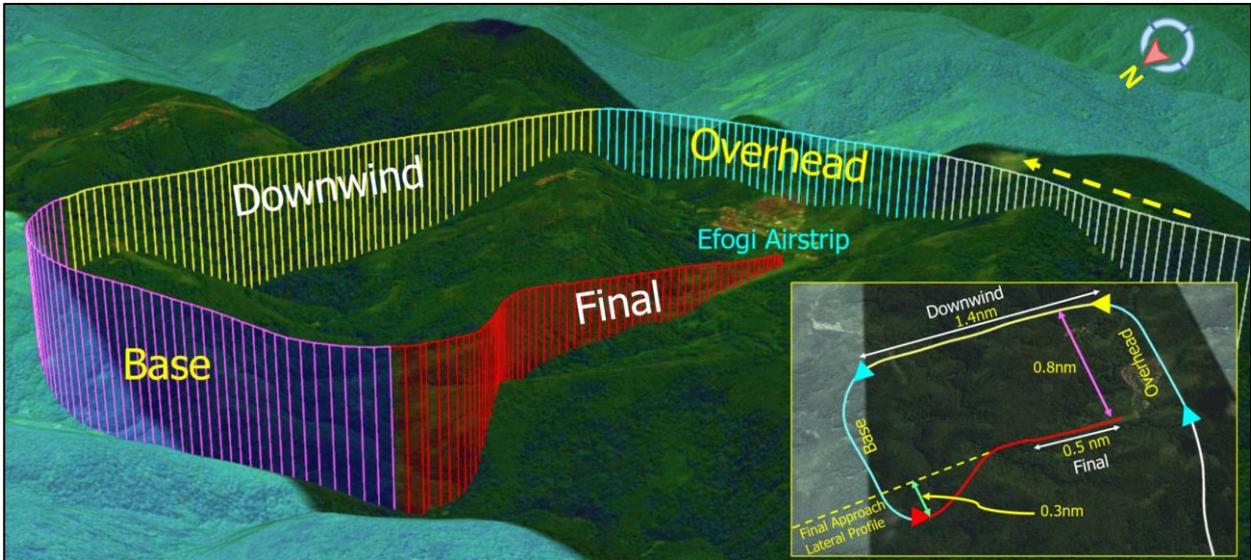


Figure 2: Circuit area at Efogi Airstrip

The PIC stated that they maintained an airspeed of 60 knots during final approach with. Upon touch down, the PIC retracted flap and pulled power to idle.

The PIC stated that during the landing roll, he could feel the aircraft running over the bumpy strip surface and added that at some point, the aircraft appeared to have bounced off the ground. About 150m from the touch-down point, the nose landing gear assembly collapsed. The nose of the aircraft subsequently dropped as the propeller blades impacted the ground. The aircraft skidded along the ground on its belly approximately 30m before it came to a complete stop.

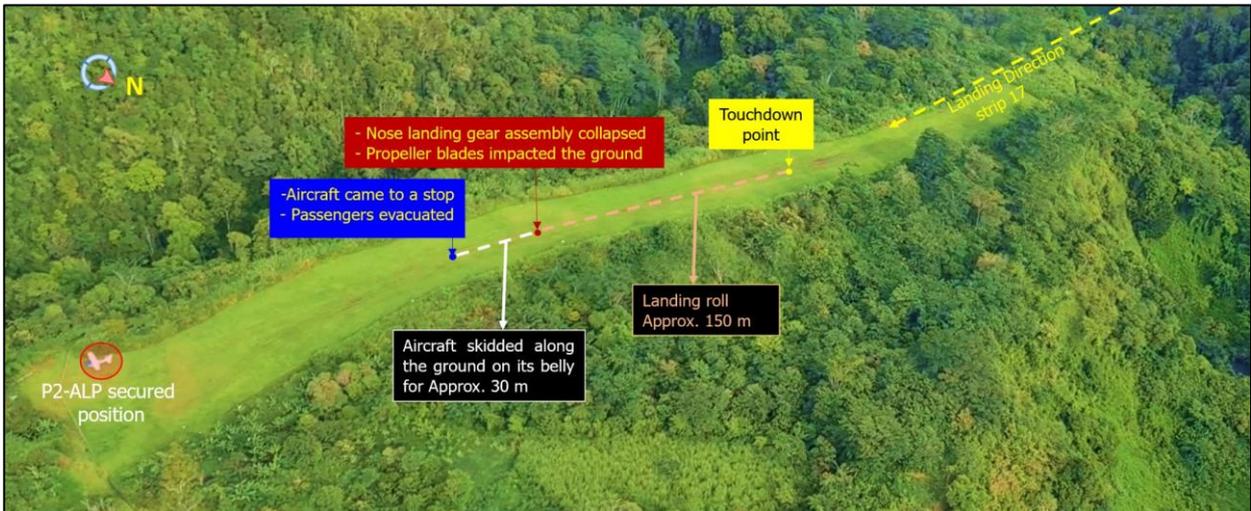


Figure 3: Efogi Airstrip

The PIC immediately shut down the engine and evacuated the passengers.

### Damage

The aircraft sustained significant damage to the nose landing gear assembly and the propeller blades.



**Figure 4: Overview of the damage sustained during impact**

### **AIC comment**

The investigation is continuing, and will consider all aspects relevant for safety, including but not limited to flight operations, aircraft systems, performance, airworthiness and serviceability, airstrip condition, weather and organisational aspects, to the appropriate extent.

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

### **Safety Actions**

At the time of the issue of this Preliminary Report, no safety actions had been taken.

### **Recommendations**

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

## General Details

Date and time	16 February 2021, 21:18 UTC	
Occurrence category	Accident	
Primary occurrence type	Abnormal Runway Contact	
Location	Efogi Airstrip, Central Province	
	Latitude: 9° 9'20.52"S	Longitude: 147°39'36.18"E
Elevation	3,800 ft	
Runway Direction	17/35	
Length	1,598 ft	
Width	98 ft	
Slope	9.5% down to North	

## Type of Operation, Injury and damage details

Type of Operation	VFR, Non-scheduled passenger	
Persons on board	Crew: 2	Passengers: 2
Injuries	Crew: Nil	Passengers: NIL
Damage	Nose landing gear assembly and propeller blades	

## Crew details

### Pilot in Command

Gender	Male
Age	41
Nationality	Papua New Guinean
Licence type	PNG CPL (A)
Total hours	1414.70
Total hours in Command	222
Total hours on type	57

### Co-Pilot (Flight Examiner)

Gender	Male
Age	39
Nationality	Australian
Licence type	PNG CPL (A & H)
Total hours	5,350.5
Total hours in Command	4,967.5
Total hours on type	66

## Aircraft Details

### Aircraft

Aircraft manufacturer	Cessna Aircraft Company
Aircraft Model	TU206G
Registration	P2-ALP
Serial number	U206-06029
Year of manufacture	1981
Total hours since new	9,574.8
Total cycles since new	13,327

### Engine

Engine manufacturer	Continental Aerospace Technologies
Engine Model	TSIO520M7B
Serial number	825532-R
Total time since new (hours)	2,653.4
Total time since overhaul (hours)	182

### Propeller

Manufacturer	McCauley Accessory Division
Model	D3A34C402-C
Serial Number	983890
Total time since new (hours)	5,425.8
Hours since Overhaul (hours)	287.6