



PRELIMINARY REPORT

AIC 23 - 1004



Strickland Bosavi Foundation Limited

VH-MZL

Cessna U206G

Runway excursion

Dodomona Airstrip

Western Province

PAPUA NEW GUINEA

7 June 2023

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, regarding 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.

This *Preliminary Aircraft Accident Investigation Report* was produced by the AIC, and contains facts known to the AIC before the official release date. The report is also publicly available on the AIC website: www.aic.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. 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.



Captain Aria Bouraga, MBE.

Acting Chief Commissioner

28 June 2023

Occurrence details

On 7 June 2023, at about 15:10 local, (05:10 UTC ¹) a Cessna 206, registered VH-MZL, owned and operated by Strickland Bosavi Foundation, conducting a private VFR² flight from Dodomona Airstrip³ to Mougulu Airstrip, in Western Province, Papua New Guinea when, during the take-off roll, the pilot aborted the takeoff due to his perception of a lack of acceleration. As the pilot applied braking to stop the aircraft on the strip it skidded and veered towards the left side of the strip. The aircraft slid off the end of the strip and overturned.

There were 4 persons on board: one pilot and three passengers. None of the occupants were injured.



Figure 1: Dodomona Airstrip showing VH-MZL wreckage and landing threshold windsock.

The pilot had departed from Mougulu Airstrip earlier in the day with the aircraft carrying one passenger and supplies and equipment for the airstrip extension work at the Dodomona Airstrip. After unloading at Dodomona he reconfigured the aircraft's cargo and seating arrangement to carry three passengers for the return flight to Mougulu Airstrip.

The pilot stated that he completed the necessary preflight checks, then taxied out and lined up for takeoff. He added that he had set the wing flaps to 20 degrees extension for a short-field takeoff with full RPM, full manifold pressure, and lean mixture for the altitude.

The pilot stated that as he was doing the engine full power run-up checks, he observed that the aircraft advanced forward by approximately 2 meters, prompting him to turn the aircraft back and realign for takeoff.

He then performed another full power run-up on the brakes, checked the windsock,⁴ and confirmed the RPM, manifold pressure, and fuel flow readings.

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 accident, Papua New Guinea Time (Pacific/Port Moresby Time) is UTC +10 hours

² Visual Flight Rules

³ Dodomona is a one-way airstrip oriented 234 deg for takeoff and 054 degrees for landing.

⁴ The windsock was on the right side of the strip adjacent to the departure threshold.

The pilot said that during the take-off roll he focused on the airspeed. His acceleration reference point was a hump about 230 metres from the take-off threshold, where he expected the indicated airspeed to be at or above 40 knots. However, the aircraft's airspeed was below 40 knots, leading him to abort the takeoff.

The pilot stated that following the decision to abort, he throttled back, retracted the flaps, and applied full braking. The aircraft bounced off the hump, touching down about 30 metres after the hump. Despite heavy braking, the aircraft started skidding and veered to the left of the strip. The pilot said that he attempted to bring the aircraft back towards the centerline because he was aware of two houses on the left side of the end of the strip.

In an attempt to slow down and avoid colliding with the houses, the pilot decided to attempt a ground loop to the right. That manoeuvre was unsuccessful and the aircraft slid off the end of the strip down a steep embankment and overturned coming to rest inverted.

AIC Comment

The investigation is continuing and will include environmental, operational, organisational and technical aspects.

The analysis, findings, safety action taken, and any recommendations to address safety concerns will be included in the *Final Report*.

Safety Actions

On 22 June 2023 the operator informed the AIC by email that the windsock at the landing threshold had been serviced since the accident and a new windsock had been installed opposite the parking bay about 40 meters from the take-off threshold. Both windsocks were tested and found to be serviceable. The location of the windsocks was to enable pilots to see both of them before commencing a take-off roll.



Figure 2: Dodomona Airstrip showing windsock near the take-off departure threshold

General Details

Date and time:	7 June 2023 05:10 UTC	
Occurrence class:	Accident	
Occurrence category:	Runway excursion	
Location:	Dodomona Airstrip	
	Latitude: 6°14'37.32"S	Longitude: 142°36'56.88"E

Crew details

Nationality	Australian
Licence type	Commercial Pilot License (CPL)
Total hours	1213.2
Total hours in Command	1033.8
Total hours on type	874.7

Aircraft, Engine & Propeller Details

Aircraft manufacturer and model:	Cessna U206G Robertson STOL	
Registration:	VH-MZL	
Serial number:	U20606661	
Total airframe hours	17,241.8	
Engine manufacturer and model	Continental IO-520-F17B	
Engine serial number	1006813	
	Total engine hours: 1635.5	Hours since overhaul: 1635.5
Propeller manufacturer	Hartzell	
Propeller serial number	FP2727B	
	Total propeller hours: 5928.6	Hours since overhaul: 1186.7
Type of operation:	Private	
Persons on board:	Crew: 1 PIC	Passengers: 3
Injuries:	Crew: Nil	Passengers: Nil
Damage	Substantial damage to the aircraft.	

Approved


Captain Aria Bouraga, MBE
Acting Chief Commissioner

28 June 2023