



PRELIMINARY REPORT

AIC 20 -1005



VH-TSI

Cessna 402C

Collision with trees during aborted take-off

16 nm north-west of Jacksons airport, Port Moresby

Papua New Guinea

26 July 2020

ABOUT THE AIC

The 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.

At around 18:00 Local (08:00 UTC) on the 26th July 2020, the Papua New Guinea Accident Investigation Commission (AIC) became aware of an alleged aircraft occurrence near Papa-Lealea, Central province. The AIC subsequently contacted Papua New Guinea Air Services Limited (ASL) and was informed by ASL that all PNG registered aircraft were accounted for. However, ASL advised AIC that they received an Emergency Locator Transmitter (ELT) distress signal and provided the ELT distress coordinates to the AIC. The AIC determined that the location of the alleged aircraft occurrence site was about 16nm North West of Port Moresby.

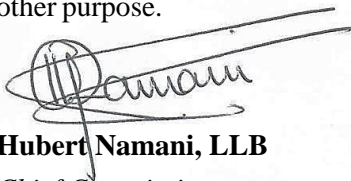
A team of investigators was dispatched to the area, locating the crash site on the morning of 27th July 2020. When the investigators arrived, the Royal Papua New Guinea Constabulary (RPNGC) police along with Australian Federal Police (AFP) were already at the site conducting police inquiries. The AIC investigators subsequently commenced an onsite investigation.

This *Preliminary Aircraft Accident Investigation Report* was produced and released by the AIC in accordance with the provisions of *Para 7.1* of *ICAO Annex 13*. The report is published on the AIC website: 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

14 August 2020

Cessna 402C collided with trees during aborted take-off at a non-certified field near Papa Lealea, about 16nm North – West of Port Moresby, Papua New Guinea

Occurrence details

On 26 July 2020, at 12:46 local time (02:46 UTC¹), a Cessna 402C aircraft, registered VH-TSI, impacted trees during an aborted take-off at an uncommissioned field near Papa – Lealea, about 16nm North-West of Port Moresby, Papua New Guinea.

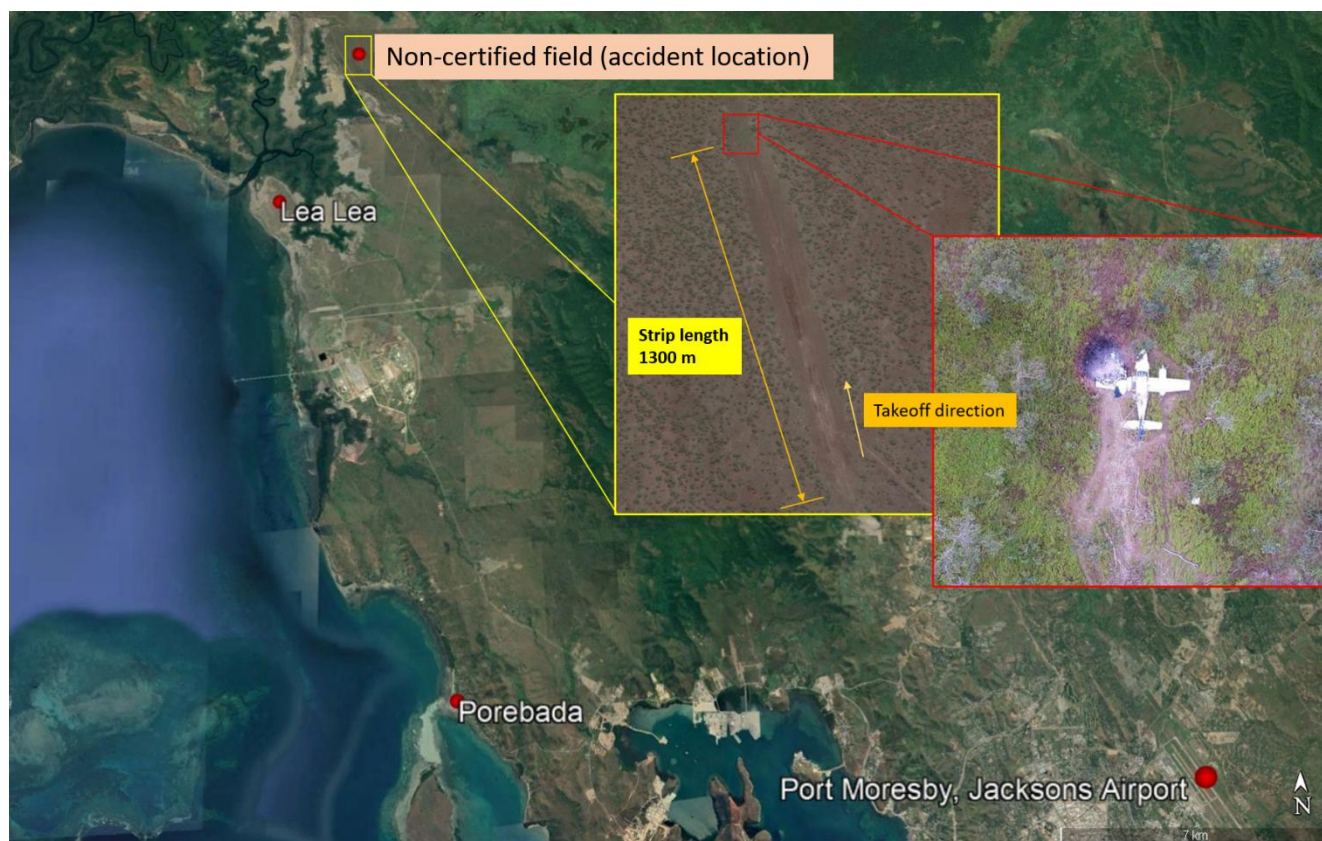


Figure 1: Depiction of accident location in relation to Jackson’s airport, Port Moresby

At about 09:30 that day, the aircraft departed Mareeba, Queensland, Australia and tracked towards the North North-East with a track set slightly left of Jacksons International Airport. The pilot reported that he had flown to and within Papua New Guinea in the past and was familiar with the area and airspace. He confirmed that after departure, he switched off the transponder².

The pilot reported that as soon as the aircraft neared the Southern shoreline (within the Caution Bay area), he diverted left and began tracking towards the North West (see Figure 2) along the coast to avoid flying over villages in the area. The aircraft subsequently crossed over land before turning back to approach the intended landing field.

The pilot stated that as he approached to land from the North, the outboard section of the left wing was clipped by a tree and separated from the aircraft and he managed to continue with the approach and touched down on the field at about 12:20.

The pilot stated that the aircraft was refuelled with aviation gasoline (AvGas) using jerrycans full of fuel and loaded with cargo by persons waiting on the ground.

According to the pilot, the field offered enough distance for take-off and at about 12:40, he commenced his take-

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, Pacific/Port Moresby Time is UTC + 10 hours.

² Radio device which when triggered by correct received signal sends out precoded reply on same (rarely different) wavelength (Source: Cambridge Aerospace dictionary)

off roll from the Southern end of the field. However, as the aircraft took off, he noticed that the airspeed indicator was not working and that the aircraft couldn't achieve a positive rate of climb. The pilot subsequently closed the throttles and aborted the take off. The aircraft touched down about 850 m into the field, colliding with trees during its landing roll.

The pilot reported he was the sole occupant of the aircraft, and sustained minor injuries.

The aircraft was substantially damaged.



Figure 2: VH-TSI track towards the field using for landing and take-off.

AIC comment

The investigation is continuing and will include operational, technical, environmental and human aspects as appropriate to determine the circumstances and causes of the occurrence with a view to avoid similar occurrences in the future, rather to ascribe blame to any person, with complete independence from any judicial, police or administrative investigation that can be conducted for purposes other than safety.

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 recommendations had been made by the AIC.

General Details

Date and time:	26 th July 2020, 12:46 Local time (02:46 UTC)	
Occurrence category:	Accident	
ICAO occurrence category:	Collision with obstacle during take-off or landing (CTOL)	
Location:	16 nm north west of Port Moresby, PNG	
	Latitude: 9°14'49.78"S	Longitude: 147°0'57.84"E

Pilot details

Nationality:	Australian
Licence type:	NA
Total hours:	NA
Total hours in Command:	NA
Total hours on type:	NA

Aircraft Details

Aircraft manufacturer and model:	Cessna 402C
Registration:	VH-TSI
Serial number:	402C0492

Type of operation, injury and damage details

Type of operation:	Take-off from an uncommissioned field.	
Persons on board:	Crew: 1 (Pilot)	Passengers: Nil
Injuries:	Crew: Minor	Passengers: Nil
Damage	Substantially damaged.	