



PRELIMINARY REPORT

AIC 24 - 2001

Tropicair Limited

P2-BBM

DHC6-300 Twin Otter

Runway Excursion During Landing

Kikori Airstrip,

Gulf Province

PAPUA NEW GUINEA

8 June 2024



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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 regard to fare-paying passenger operations.

The AIC performs its functions in accordance with the provisions of the *Papua New Guinea Civil Aviation Act 2000 (as amended)*, 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 8 June 2024 at 13:23 local time (03:23 UTC), the AIC was notified by Tropicair Limited (Ltd) about an occurrence which had occurred on the same day at 11:43 local time. The occurrence involved a DHC-6-300 Twin Otter aircraft, registered P2-BBM, owned and operated by Tropicair Ltd. The AIC immediately began gathering information and a team of investigators was dispatched to the occurrence site to gather evidence and assess damage to the aircraft. The AIC commenced the serious incident investigation on the same day.

This Preliminary Aircraft Serious Incident Investigation Report was produced by the AIC, and contains facts known to the AIC before the official release date. It is released by the Commission in accordance with *Paragraph 7.1* of *ICAO Annex 13*. The report is also publicly available on the AIC website <https://www.aic.gov.pg>.

The report is based on the initial investigation carried out by the AIC in accordance with PNG *Civil Aviation Act 2000 (as amended)*, *Chapter 31* of the *Commissions of Inquiry Act 1951*, *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 promotes 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 *ICAO Annex 13*, it is not the purpose of the Commission's aircraft serious incident 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.



Maryanne J. Wal

Chief Commissioner

5 July 2024

Occurrence details

On 8 June 2024, at 11:43 local (01:43 UTC ¹), a DHC6-300 Twin Otter aircraft, registered P2-BBM, owned and operated by Tropicair Limited (Ltd), was conducting an IFR² Fares and Freight flight from Kerema Airport to Kikori Airstrip, Gulf Province, Papua New Guinea, when, during landing roll at Kikori, it experienced a runway excursion and rolled into a drainage ditch which runs along the left side of the runway and impacted the embankment.



Figure 1. Depiction of P2-BBM flight path.

There were sixteen (16) persons on board: two (2) crew and fourteen (14) passengers.

The Pilot in Command (PIC) was pilot flying (PF), and the co-pilot was pilot monitoring (PM).

According to Air Traffic Services (ATS) recorded data, the aircraft departed Kerema Airport at 11:04, commenced a climb to an altitude of 8,000 ft Above Mean Sea Level (AMSL) and began tracking Northwest to Kikori Airstrip with an estimated arrival time of 11:45.

The PIC stated that there was no significant weather along the route. He added that on arrival in the Kikori area, there were light clouds present and no rain over the airstrip. The recorded data showed that the aircraft continued to track Northwest towards Kikori Airstrip for a straight in approach for Runway (RWY) 30.

The PIC further stated that he commenced the approach initially in light cloud and became visual 4 nautical miles (NM) from runway (RWY) 30 at about 700-800 feet (ft) above ground level (AGL). Recorded data showed that at 11:41, the aircraft established on final for RWY 30 at 810 ft AGL, approximately 3 NM from Kikori Airstrip.

ATS records showed that at 11:42, the co-pilot cancelled SARWATCH³ while in the Kikori circuit area.

Recorded data showed that the aircraft touched down at 11:43. According to the PIC the touchdown and initial landing roll were normal, however, as he pulled back the power levers the aircraft began to veer left of the centerline. He tried to get the aircraft back onto the centerline and the aircraft turned back to the right towards the centerline, however it then began to veer further right.

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 Instrument Flight Rules: Rules and regulations established to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments in the flight deck, and navigation is accomplished by reference to electronic signals. It is also a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying, such as an IFR or VFR flight plan.

³ SARWATCH is used for IFR (instrument) flights. The aircraft makes a taxi call to flight service/ground etc. and reports at each reporting point. SAR action will be initiated if the aircraft is overdue by more than two minutes at any reporting point.



Figure 2. Circuit area at Kikori

The aircraft began to slow down as it continued to roll along the runway. The PIC stated that while trying to slow the aircraft down, the aircraft veered to the left again towards the left edge of runway 30. He stated that he tried to slow the aircraft further by applying full reverse thrust, however, the aircraft continued past the runway edge and into an adjacent drainage ditch.

The aircraft impacted the embankment and came to rest. The PIC subsequently shut down the engines and advised the co-pilot to evacuate the passengers. The co-pilot and the passengers egressed the aircraft through the left rear exit door and the PIC egressed the aircraft from the left-side cockpit door. There were no reported injuries to the crew and passengers.



Figure 3. Overview of damage sustained to the aircraft.

Damage

The aircraft sustained damage to the nose cone and a punctured nosewheel tyre on impact (*see Figure 3*).

AIC Comment

The investigation is continuing and intends to understand the reason for the runway excursion. The investigation will also include but not limited to the operations, systems, performance, maintenance and serviceability, organisational aspects, design and manufacture.

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 have been reported.

Recommendations

At the time of the issue of this preliminary report, no safety recommendations have been issued by the AIC.

General Details

Date and time:	8 June 2024, 11:45 (01:45 UTC)	
Occurrence category:	Serious Incident	
Primary occurrence type:	Runway excursion during landing roll	
Location:	Kikori Airstrip, Gulf Province	
	Latitude: 7° 25' 12"S	Longitude: 144°14' 56.66"E
	Elevation: 40 ft	Runway Length: 705 m
	Airstrip type: Two-way Landing & Taking off.	

Crew details

Pilot-in-Command	
Nationality	Fiji
Gender	Male
Age	42
Licence type	ATPL Aeroplane
Total hours	6,166.4
Total hours in Command	2,245.3
Total hours on type	6095.48

Co-pilot	
Nationality	Papua New Guinea
Gender	Male
Age	24
Licence type	CPL Aeroplane
Total hours	1,426.3
Total hours in Command	129.30
Total hours on type	1087.9

Type of Operation, Persons on Board and Injury.	
Type of operation	Fares and Freight
Persons on Board	Crew: 2 (PIC and Co-pilot) Passengers: 14
Injuries	Crew: Nil Passengers: Nil

Aircraft Details

Airframe	
Aircraft manufacturer and model:	Viking Air Limited / DHC6-300
Registration:	P2-BBM
Serial number:	542
Year of Manufacture	1977
Engine	
Engine manufacturer and model	Pratt & Whitney, PTA-34
Left Engine Serial Number	PCE-RB0793
Right Engine Serial Number	PCE-RB0794
Propeller	

Propeller Make and Model	Hartzell / HC-B3TN-#D
Left Propeller Serial Number	BUA-25584
Right Propeller Serial Number	BUA-28618