



PRELIMINARY REPORT

AIC 20 - 2005

PNG Air Limited

P2-ATB

ATR 72 - 212A

In-flight fire warning on approach

Mt Hagen Airport, Western Highlands Province

Papua New Guinea

23 December 2020



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 in accordance with *Annex 13* to the *Convention on International Civil Aviation*.

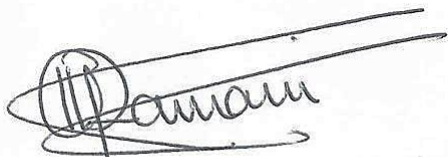
The objective of a safety investigation is to identify and reduce safety-related risk. AIC investigations determine and communicate the safety factors related to the transport safety matter being investigated.

On 23 December 2020, at about 15:35 local time (05:35 UTC), the AIC was notified by Niusky Pacific Limited via email and shortly after by a phone call from the air operator, about an inflight fire warning on No. 2 Engine (right-hand) of an ATR 72 – 212A aircraft. The AIC immediately commenced a serious incident investigation.

This *Preliminary Report* has been produced by the AIC pursuant to *ICAO Annex 13, Chapter 7, paragraphs 7.1, 7.3 and 7.4* and it contains facts known to the AIC before the official release date. The report is also published on the AIC website: www.aic.gov.pg

The report is based on initial investigation activities carried out by the AIC under the 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 *PNG AIC 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* (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 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 other purpose.



Hubert Namani, LLB
Chief Commissioner
22 January 2021

Occurrence details

On 23 December 2020, at 13:52 local (03:52 UTC¹), an ATR 72 – 212A aircraft, registered P2-ATB, operated by PNG Air Limited, on a scheduled passenger flight from Kiunga Airport, Western Province to Mount Hagen Airport, Western Highlands Province, had a No. 2 engine (right-hand) fire warning activation, during base turn at the destination airport circuit area.



Figure 1: P2-ATB depiction of flight path.

There were 63 persons onboard the aircraft: two pilots, two cabin crew and 59 passengers.

The flight crew had completed the before landing checklist and configured the aircraft for landing and notified ATC about 5 nm West of the aerodrome tracking to join the circuit on left downwind for runway 30. The aircraft joined and tracked downwind and, at 13:51:37 as the aircraft became established on base, ATC provided clearance for landing on runway 30. Less than a minute later, at 13:52:31, as the crew continued along the base leg for approach, the No. 2 engine fire warning activated.

According to the flight crew, they identified and confirmed that the warning was indeed associated with No.2 engine and immediately proceeded to shut down the engine by setting its power lever to idle, the respective condition lever to feather position, checking that the rudder trim was centered, and then taking the condition lever to fuel shut-off position.

As the aircraft reached a height of 500 ft on final approach, the flight crew discharged the fire extinguishing agent 1 for the No.2 engine. The flight crew continued the descent and at about 50 ft height, they discharged the fire extinguishing agent 2 for the same engine. P2-ATB landed at 13:54:08.

While in the landing roll, the flight crew notified ATC about engine fire. The flight crew exited the runway via taxiway A and taxied to the parking bay. As the aircraft came to a stop, the flight crew instructed one of the cabin crew to look out through the windows on the right side and check if there was any indication of fire from the engine. The cabin crew reported back stating that there was no indication of fire. The flight crew shut down the No.1 engine and a normal passenger disembarkation was conducted.

No injuries or damage were reported as a result of the occurrence.

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

AIC comment

The investigation is continuing and will include the aircraft, operations, maintenance and organisational aspects, regulatory and other areas as applicable.

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 *Safety Recommendation* had been made by the AIC.

General Details

Date and time:	23 December 2020, at 13:52 local (03:52 UTC)		
Occurrence category:	Serious Incident		
Primary occurrence type:	F-NI: Fire/smoke non-impact		
Location	Mount Hagen Airport, Western Highlands Province.		
	Latitude	05° 49' 40.1" S	
	Longitude	144° 17' 58.3" E	
Elevation	5,386 ft		
Runways	RWY 12	RWY 30	Slope of RWY 0.2 % Down to SE
	RWY 08	RWY 26	Slope of RWY 0.2 % Down to SE
RFFS Category	Category Six (6)		
Apron surface and strength	MAIN APN SEALED, PCN 30, GA APN SEALED MAX 5,700KG		

Crew details

Pilot in Command (PIC)

Nationality:	Papua New Guinean
Licence type:	ATPL
Total hours:	12,747
Total hours in Command:	10,913
Total hours on type:	1165

Copilot

Nationality:	Papua New Guinean
Licence type:	CPL
Total hours	835.60
Total hours in Command	Not available
Total hours on type	578

Type of Operation, Injury and damage details

Type of operation:	Scheduled Passenger Flight	
Persons on board:	Flight Crew: 2 (PIC and copilot) Cabin Crew: 2	Passengers: 59
Injuries:	Crew: None	Passengers: None
Damage:	None	

Aircraft Details

Aircraft manufacturer and model:	ATR 72 – 212A
Registration:	P2-ATB
Serial number:	1317
Year of Manufacturer	2016
Total Hours since new	8,049.8
Total Cycles since new	8,131

Engine Data

Engine type:	Turboprop
Manufacturer:	Pratt and Whitney Canada
Model:	PW127M

Engine number one (Left)	
Serial number:	PCE-ED1202
Total Time since new:	8,049.8
Cycles since new:	8,131
Engine number two (Right)	
Serial Number:	PCE-ED1201
Total Time since new:	7,566.40
Cycles since new:	7,693

Propeller Data

Manufacturer	Hamilton Sundstrand Aerospace, Division of Hamilton Sundstrand Corp.
Part Number & Model:	815500-3 & 568F-1
Propeller number one (Left)	
Serial number:	FR20151123
Total Time since new:	8,049.8
Cycles since new:	8,131
Engine number two (Right)	
Serial Number:	FR20151124
Total Time since new:	8,049.8
Cycles since new:	8,131