



PRELIMINARY REPORT

AIC 19 -1002



Ramu - Agriculture Industries

P2-SET

Air Tractor AT-502B

Impact with tree

6.8 nm northwest of Baimuru Airstrip, Gulf province

Papua New Guinea

29 August 2019

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 06:57 UTC, 4:57 pm local time on the 29th August 2019, Papua New Guinea Air Services Limited (ASL) notified the Papua New Guinea Accident Investigation Commission (AIC) of the unreported arrival at Gusap, Madang Province of Air Tractor AT-502B aircraft, registered P2-SET, operated by Ramu Agri Industries Limited.

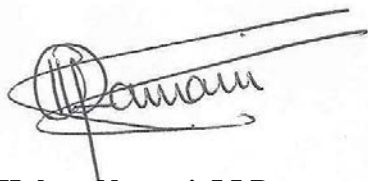
Information received from the Karaulti area in the Gulf Province later in the evening indicated that the aircraft had crashed in that area, but had not been located. The AIC dispatched a team of investigators to the area on the morning of 30th August 2019 and immediately commenced an on-site investigation and interviewing of the locals.

This *Preliminary Aircraft Accident Investigation Report* was produced by the AIC, PO Box 1709, Boroko 111, NCD, Papua New Guinea. It is publicly released by the Commission in accordance with *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

13th September 2019

Air Tractor AT-502B impact with obstacle/tree 6.8 nm north west of Baimuru Airstrip, Gulf Province.

Occurrence details

On 29th August 2019, an Air Tractor AT-502B aircraft, registered P2-SET, operated by Ramu – Agriculture Industries, was conducting a VFR¹ ferry flight from Daru, Western Province to Gusap, Madang Province, when it impacted a tree near the Era River, about 6.8 nm north west of Baimuru Airstrip, Gulf Province.

The pilot reported normal operations at 00:11 UTC² while in the cruise phase at 9000 ft and was required to report at 30 minutes intervals thereafter. There was no communication with the aircraft after 00:11. At 01:45 Air Traffic Services (ATS) began radio checks due to the pilot not having reported at his nominated reporting time of 01:45.

Air Traffic Services declared an Uncertainty Phase at 01:10 and upgraded to a Distress Phase at 03:10.

Local villagers who saw the aircraft flying in the area of the accident described the aircraft as flying at a low height in rain. Their description indicated that the aircraft was flying below 200 ft above ground level the Kikori Delta area. They said that they could see and hear the aircraft circling around the area above the trees for almost an hour before there was a sudden loud bang sound with a sudden stop of engine noise. Villagers within a 10 nm radius reported hearing the sound of the impact.

At about 02:30 on 30th August, the main wreckage was located. The pilot, the sole occupant, was found deceased in the aircraft.

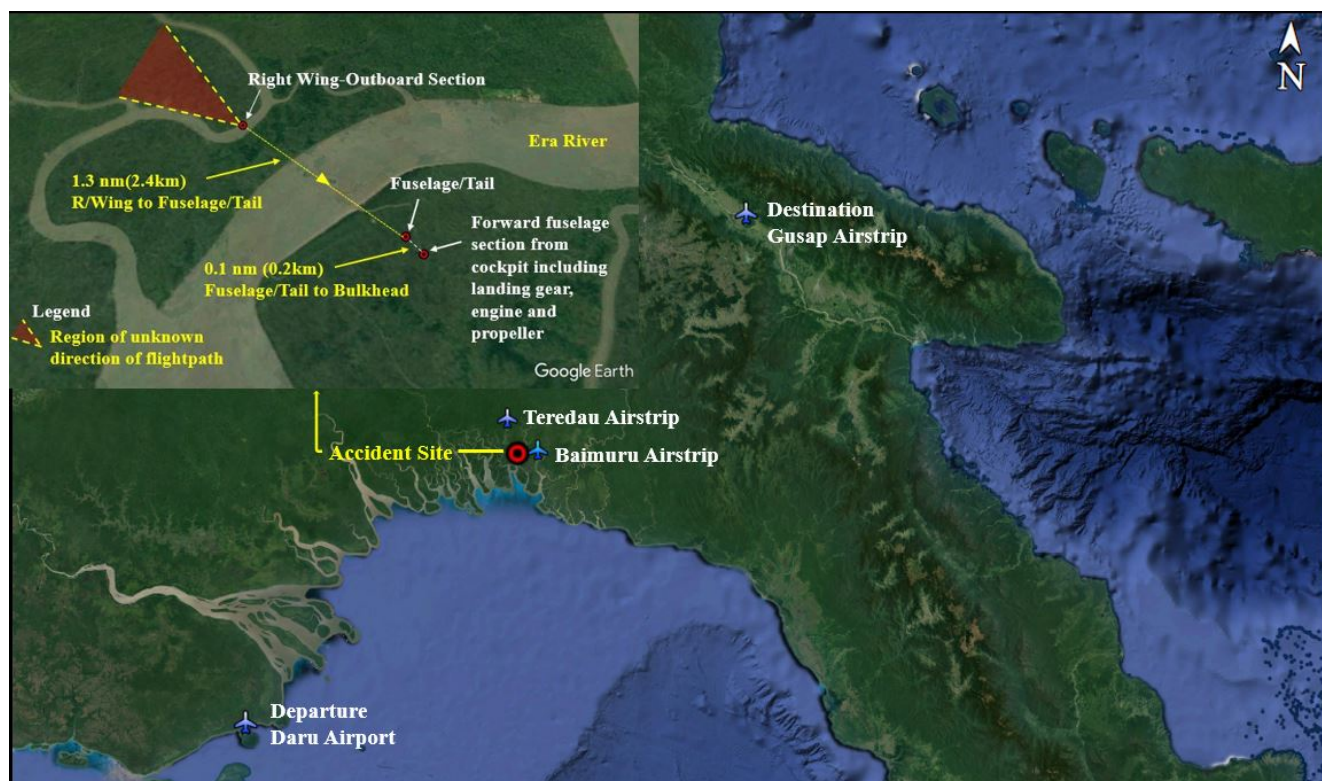


Figure 1: Depiction of accident location in relation to Baimuru Airstrip

1 **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*)

2 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/Chuuk Time is UTC + 10 hours.

The investigation team found that the outboard section of the aircraft's right wing was torn off as the wing clipped palm trees. The aircraft continued for another 1.3 nm before it impacted a thick tree trunk about 13 metres above ground level. The forward fuselage and engine section separated from the airframe at the bulkhead between the cockpit and the hopper. The forward fuselage including the hopper, main landing gear, engine and propeller continued another 290 metres along the direction of the flight path before becoming deeply embedded in mud. (See figure 1).

AIC comment

The investigation is continuing and will include the aircraft, its engine, operational and organisational aspects, safety management systems, search and rescue coordination notifications and operation.

The investigation will also include a detailed accident review of the radio communications and flight operational and maintenance records as appropriate.

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 recommendations had been by the AIC.

General Details

Date and time:	29 th August 2019, 01:24 UTC	
Occurrence category:	Accident	
Primary occurrence type:	Aircraft collision with obstacle/tree	
Location:	6.8 nm north west of Baimuru Airstrip, Gulf Province, PNG	
	Latitude: 7° 27' 48.56" S	Longitude: 144° 42' 52.58" E

Pilot details

Nationality:	Australian
Licence type:	PNG CPL A
Licence number:	P22042
Total hours:	24,000 +
Total hours in Command:	24,000
Total hours on type:	2,500 +

Aircraft Details

Aircraft manufacturer and model:	Air Tractor AT-502B
Registration:	P2-SET
Serial number:	502B-0255

Type of operation, injury and damage details

Type of operation:	Unscheduled VFR; Ferry	
Persons on board:	Crew: 1 (Pilot)	Passengers: Nil
Injuries:	Crew: Fatal	Passengers: Nil
Damage	Aircraft destroyed.	

Engine data

Engine type:	Turbo propeller
Manufacturer:	Pratt & Whitney Canada
Model:	PT6A-34AG
Serial number:	PCE-PH0383
Total Time since new:	2084.5
Cycles since new:	3593

Propeller data

Propeller manufacturer and model:	Hartzell Propellers; HC-B3TN-3D
Serial number:	BUA21376