



FINAL REPORT

AIC 14- 1006

**PAPUA NEW GUINEA
ACCIDENT INVESTIGATION COMMISSION
SHORT SUMMARY REPORT**

HeviLift Ltd

P2-HCO

Bell 206

VFR into IMC - Contact with trees

15 nm southwest Mt Hagen

PAPUA NEW GUINEA

21 September 2014

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), Civil Aviation Rules 2004 (as amended), and the Commissions of Inquiry Act 1951 (as amended), and in accordance with 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.

Readers are advised that in accordance with Annex 13 to the Convention on International Civil Aviation, it is not the purpose of an AIC aircraft accident investigation to apportion blame or liability. The sole objective of the investigation and the Final Report is the prevention of accidents and incidents. (Reference: ICAO Annex 13, Chapter 3, paragraph 3.1.)

However, it is recognised that an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the AIC endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why it happened, in a fair and unbiased manner.

About this report

Decisions regarding whether to conduct an investigation, and the scope of an investigation, are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, a limited-scope, fact-gathering investigation was conducted in order to produce a short summary report, and allow for greater industry awareness of potential safety issues and possible safety actions.

VFR into IMC – contact with trees involving Bell 206L, P2-HCO

Occurrence details

On the afternoon of 21 September 2014, at 04:30 UTC¹, the Bell 206L operated by HeviLift Ltd, was being flown on the return leg of a VFR flight from Mt. Hagen to Gobe, near the border of the Gulf and Southern Highlands Provinces. There were two persons on board; the pilot and a company avionics engineer who had to conducted maintenance on the company Twin Otter based at Gobe airstrip in the.

Prior to departing from Gobe the pilot contacted the Mt. Hagen HeviLift office for a weather update. He was informed that the weather was holding. With full fuel on board and the option to return to Gobe in case the weather deteriorated en route, the helicopter departed for Mt. Hagen. The weather along the route was isolated heavy rain showers and low cloud. The pilot was able to navigate his way around the weather until 15nm southwest of Mt Hagen, south of the Kuta Ridge.



Figure 1: Flight path.

There was heavy rain and cloud build ups on track, so the pilot decided to descend into a small valley to try and fly around the heavy rain and cloud build ups. He stated during the interview that there was cloud around, but he could see where he was going, so he continued.

¹ The 24-hour clock is used in this report to describe the local time of day, Local Mean Time (LMT), as particular events occurred. Local Mean Time was Coordinated Universal Time (UTC) + 10 hours.

The cloud was building up fast and as the flight progressed down the valley the pilot realised that the cloud had closed the valley in front of him. He immediately commenced a right turn to try and fly back up the valley, but the cloud had moved in very fast and the aircraft entered cloud and was in Instrument Meteorological Conditions (IMC).

The pilot who had some instrument flying experience, was able to fly the helicopter on instruments and get back on the reciprocal track in an attempt to return to Visual Meteorological Condition (VMC). During the turn the passenger in the left front seat saw trees and immediately alerted the pilot.

The pilot took evasive action by pulling back on the cyclic and raising the collective to avoid colliding with the trees. He was able to manoeuvre away, but during the turn the lower section of the vertical stabilizer and the tail rotor blades made contact with the trees.

Shortly after, the aircraft was clear of cloud and in VMC. After assessing the aircraft's handling and performance, the pilot decided to continue the flight to Mt. Hagen. The damaged was subsequently assessed by the operator's engineers at Mt Hagen.



Figure 2: Damaged lower section of the vertical stabilizer

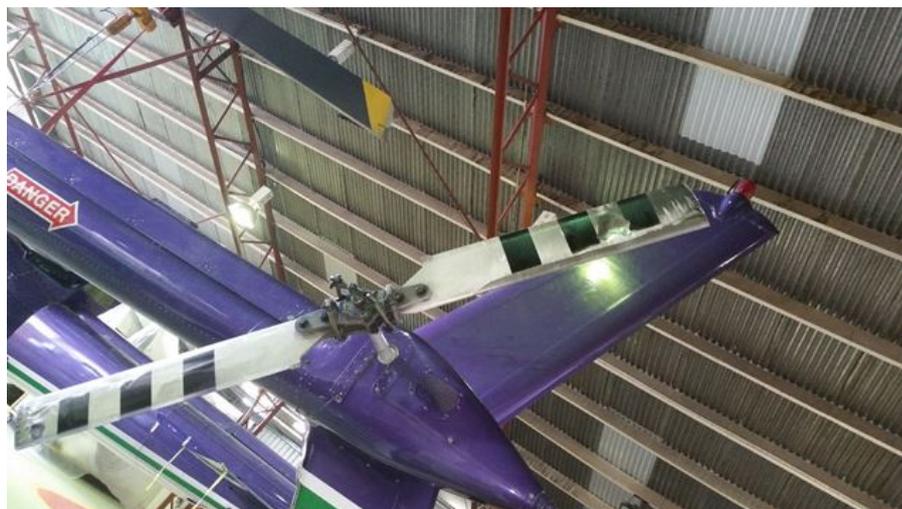


Figure 3: Evidence of tail rotor damage

AIC Comment

The pilot continued the flight along the small valley in rapidly deteriorating weather conditions and did not leave himself an escape route that would ensure he could remain clear of cloud and in sight of the ground.

General Details

| | | |
|--------------------------|-----------------------------------|---------------------------|
| Date and time: | 21 September 2014 04:30 UTC | |
| Occurrence category: | Accident | |
| Primary occurrence type: | VFR into IMC – Contact with trees | |
| Location: | 15 NM Southwest Mt Hagen | |
| | Latitude: Not determined | Longitude: Not determined |

Crew details

| | |
|---------------------|----------------|
| Nationality | Australian |
| Licence type | ATPL/CPL (PNG) |
| Licence number | P21712 |
| Total hours | 6,271 hours |
| Total hours on type | 3,496 hours |

Aircraft Details

| | | |
|----------------------------------|-------------|-----------------|
| Aircraft manufacturer and model: | Bell 206L3 | |
| Registration: | P2-HCO | |
| Serial number: | 51178 | |
| Engine manufacturer and model | RR250-C30P | |
| Engine serial number | CAE860238 | |
| Type of operation: | Aerial work | |
| Persons on board: | Crew: 1 | Passengers: 1 |
| Injuries: | Crew: Nil | Passengers: Nil |
| Damage | Substantial | |

Approved


David Inau
CEO
Accident Investigation Commission