



Australian Government

Australian Transport Safety Bureau

Collision with terrain involving Bell Helicopter 206L-4, VH-PRW

33 km north-west of Adaminaby, New South Wales on 3 April 2022

ATSB Transport Safety Report

Aviation Occurrence Investigation (Short)

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Preliminary – 5 August 2022

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Addendum

Page	Change	Date

Preliminary report

This preliminary report details factual information established in the investigation's early evidence collection phase, and has been prepared to provide timely information to the industry and public. Preliminary reports contain no analysis or findings, which will be detailed in the investigation's final report. The information contained in this preliminary report is released in accordance with section 25 of the *Transport Safety Investigation Act 2003*.

The occurrence

On the morning of 3 April 2022, a Bell Helicopter 206L-4, registered VH-PRW, departed from a private property at Majura, Australian Capital Territory for a visual flight rules¹ (VFR) flight to Mangalore, Victoria. The flight departed with the pilot and one passenger on board and included a planned refuelling stop in Tumut, New South Wales (NSW). The aircraft was one of 7 helicopters taking part in a flying tour, following a common itinerary but operating independently.

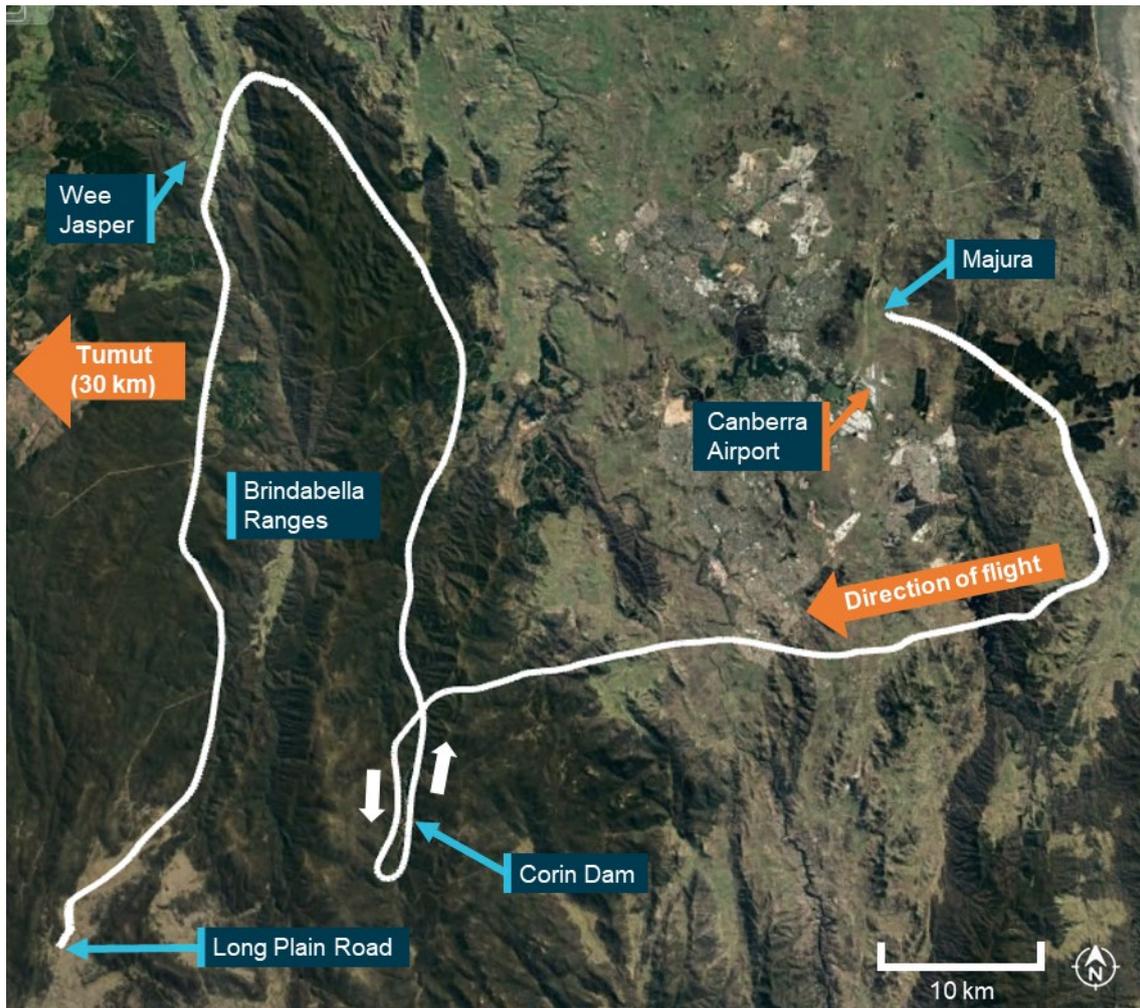
The weather forecast indicated that the planned route could be affected by low cloud, rain and associated reduced visibility. At about 0900 Eastern Standard Time,² the tour organiser departed Majura in a helicopter to observe the weather along the planned route. Based on their assessment of the en route weather, the organiser recommended that the flights should track north of the planned route and refuel at Wagga Wagga, NSW.

Recorded flight tracking data showed that at 1021, VH-PRW departed the property at Majura. The helicopter initially tracked south-east before turning west toward the Brindabella Ranges (Figure 1). The flight then proceeded south over Corin Dam before heading north to Wee Jasper. After passing Wee Jasper, the flight again turned south toward the ranges.

¹ Visual flight rules (VFR): a set of regulations that permit a pilot to operate an aircraft only in weather conditions generally clear enough to fly the aircraft while maintaining visual separation from terrain and other aircraft.

² Eastern standard time (EST): Coordinated universal time (UTC) + 10 hours.

Figure 1: Flight from Majura to Long Plain



Source: Google Earth and OzRunways, annotated by ATSB

During their flights, the occupants of the other helicopters in the tour encountered deteriorating cloud and visibility conditions and landed on a property near Wee Jasper. When VH-PRW did not arrive, authorities were notified and commenced a search for the helicopter.

At 1129, the pilot of VH-PRW landed the helicopter alongside Long Plain Road in the Brindabella region. Shortly after the helicopter landed, a passing motorist on Long Plain Road stopped and approached the aircraft. The motorist transported the pilot to a location that enabled phone contact with other members of the tour. The pilot advised other members of the tour of the safe landing and that the intended destination had been Tumut, not Wagga Wagga as recommended by the tour organiser. The motorist and pilot then returned to the aircraft.

Recorded flight tracking data showed that at 1453, the helicopter departed Long Plain Road with the pilot and passenger on board. Police officers dispatched to locate the helicopter arrived at the landing site just after it became airborne. The motorist and police officers observed the aircraft depart to the south at low level, in overcast conditions with low cloud and light rain.

The flight progressed at heights below 500 ft above ground level (AGL) following geographical features along lower lying terrain. At 1504, the flight turned north-west and took up a track that corresponded with a direct track to Tumut. Two minutes later, the helicopter encountered higher terrain and turned around to head southward, again following lower lying terrain. At 1517, in the vicinity of Anglers Reach, the flight turned north (Figure 3). Two minutes later, the helicopter turned to the north-west, again along a flightpath that corresponded with a direct track to Tumut and commenced a climb to 7,000 ft above mean sea level (AMSL) (about 2,500 ft AGL).

Figure 2: Accident flight



Source: Google Earth and OzRunways, annotated by ATSB

The helicopter continued along that track at about 7,000 ft AMSL for 6 minutes until 1525. The helicopter then descended to 6,800 ft, before almost immediately climbing. After reaching 7,400 ft, the helicopter commenced a steep left descending turn. During the turn, the ground speed increased to 134 kt and the descent rate exceeded 3,800 feet per minute.

At 1526, the aircraft impacted terrain at an elevation of 4,501 ft. The helicopter was destroyed, and both occupants were fatally injured.

On the morning of April 4, in response to the aircraft not arriving at Mangalore as expected, a second search was initiated. Poor weather prevented an airborne search. At about 2355, a ground search assisted by aircraft tracking data located the accident site.

Context

Pilot information

The pilot was the aircraft owner and held a valid class 2 medical certificate and a private pilot licence (helicopter).

At the time of the accident, the pilot had about 837 hours of aeronautical experience and did not hold an instrument rating. The pilot's total flying experience on the Bell 206 was about 532 hours of which about 355 were in the L-4 variant and the remainder in the B-3 variant.

Aircraft information

The Bell Helicopter 206L-4 is a 7-seat, single-turboshaft engine helicopter equipped with 2-bladed main and tail rotors. VH-PRW was built in 2008 and first registered in Australia in 2016. At the time of the accident, the helicopter had completed about 830 hours in service and was certified for day VFR flight only.

Meteorological information

The graphical area forecast for the area at the time of the accident indicated broken³ cumulus/stratocumulus cloud with a base of 2,500 ft AMSL and a top of 10,000 ft AMSL.

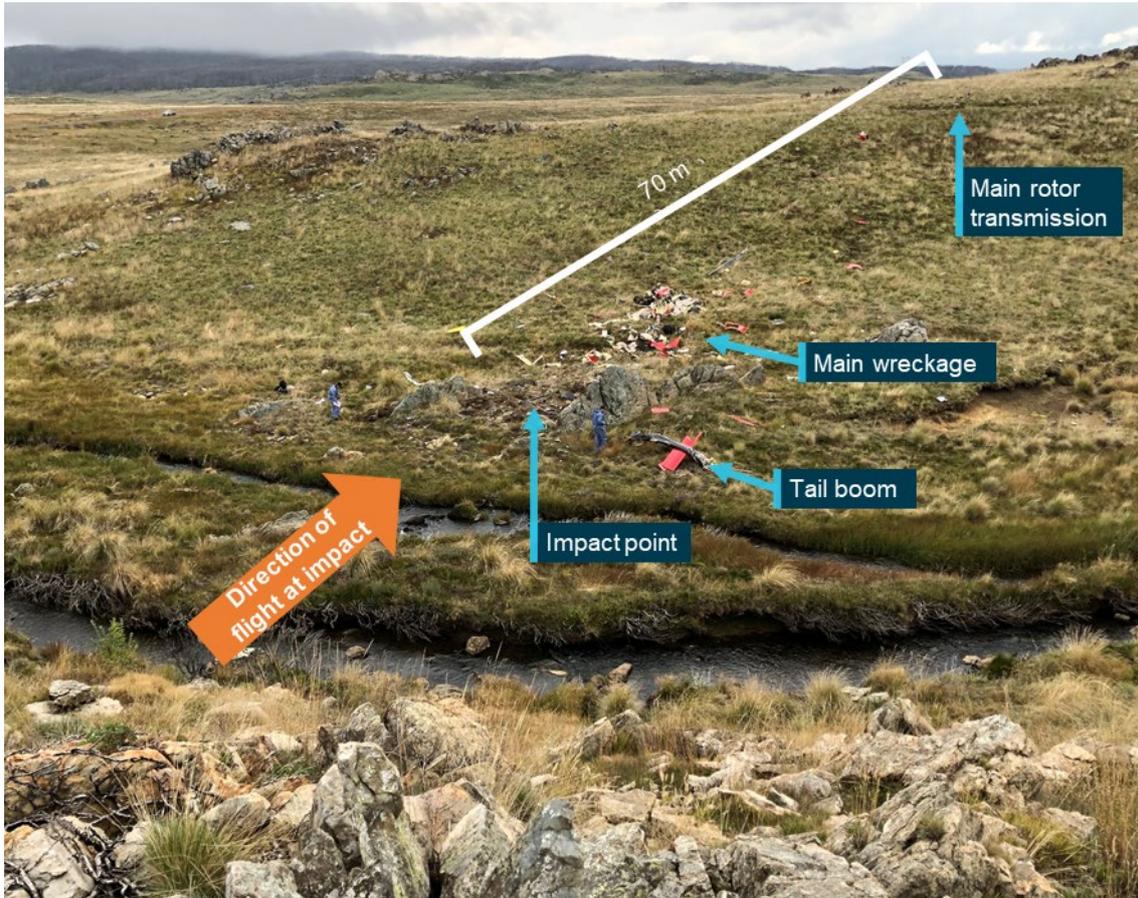
At 1530 (4 minutes after the accident), Bureau of Meteorology weather stations at Cabramurra (14 km south-west of the accident site, elevation 4,864 ft) and Mount Ginini (43 km north-east of the accident site, elevation 5,774 ft) recorded no rainfall and zero separation between the dew point temperature and air temperature. This indicated cloud was present at both stations, however neither station was equipped to provide more detailed cloud information.

Site and wreckage information

The accident site was located within the Kosciuszko National Park in an area of tussock grass, interspersed by bare protruding rock (Figure 3).

³ Cloud cover: in aviation, cloud cover is reported using words that denote the extent of the cover – 'broken' indicates that more than half to almost all the sky is covered.

Figure 3: Accident site



Source: ATSB

The helicopter collided with terrain between two rock formations in a descending tight left turn and right side-slip in a northerly direction with a westerly heading. At initial impact, a main rotor blade struck the ground and the tail boom separated. The fuselage then turned left to about a southerly heading. Most of the wreckage was located within 8 m of the impact, but the main transmission, mounts and supporting airframe structure continued a further 70 m up an incline. On-site examination indicated that the engine was providing power at impact. There was no evidence of an in-flight break-up or a pre-existing defect with the drive train or flight controls.

Further investigation

The ATSB investigation to date has examined the accident site and wreckage, interviewed witnesses, collected meteorological data, pilot and flight records and obtained aircraft tracking data.

The investigation is continuing and will include further review and examination of:

- pilot records and medical information
- aircraft maintenance and flight records
- aircraft wreckage and recovered components
- emergency locator transmitter functionality
- witness information
- meteorological data
- recorded aircraft tracking data.

Should a critical safety issue be identified during the course of the investigation, the ATSB will immediately notify relevant parties so appropriate and timely safety action can be taken.

A final report will be released at the conclusion of the investigation.

General details

Occurrence details

Date and time:	3 April 2022 – 1526 EST	
Occurrence class:	Accident	
Occurrence categories:	Collision with terrain	
Location:	33 km north-west of Adaminaby, New South Wales	
	Latitude: 35° 50.404' S	Longitude: 148° 29.613' E

Aircraft details

Manufacturer and model:	BELL HELICOPTER TEXTRON CANADA LTD 206L-4	
Registration:	VH-PRW	
Serial number:	52371	
Type of operation:	General Aviation	
Departure:	Long Plain, New South Wales	
Destination:	Tumut, New South Wales	
Persons on board:	Crew – 1	Passengers – 1
Injuries:	Crew – 1 [Fatal]	Passengers – 1 [Fatal]
Damage:	Destroyed	