



**Australian Government**

**Australian Transport Safety Bureau**

# Collision with terrain involving a Bell 206B, VH-BNG

near Mission Beach, Queensland, 20 February 2014

**ATSB Transport Safety Report**  
Aviation Occurrence Investigation  
AO-2014-027  
Final – 8 April 2014

Released in accordance with section 25 of the *Transport Safety Investigation Act 2003*

#### **Publishing information**

**Published by:** Australian Transport Safety Bureau  
**Postal address:** PO Box 967, Civic Square ACT 2608  
**Office:** 62 Northbourne Avenue Canberra, Australian Capital Territory 2601  
**Telephone:** 1800 020 616, from overseas +61 2 6257 4150 (24 hours)  
Accident and incident notification: 1800 011 034 (24 hours)  
**Facsimile:** 02 6247 3117, from overseas +61 2 6247 3117  
**Email:** [atsbinfo@atsb.gov.au](mailto:atsbinfo@atsb.gov.au)  
**Internet:** [www.atsb.gov.au](http://www.atsb.gov.au)

© Commonwealth of Australia 2014



#### **Ownership of intellectual property rights in this publication**

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia.

#### **Creative Commons licence**

With the exception of the Coat of Arms, ATSB logo, and photos and graphics in which a third party holds copyright, this publication is licensed under a Creative Commons Attribution 3.0 Australia licence.

Creative Commons Attribution 3.0 Australia Licence is a standard form license agreement that allows you to copy, distribute, transmit and adapt this publication provided that you attribute the work.

The ATSB's preference is that you attribute this publication (and any material sourced from it) using the following wording: *Source:* Australian Transport Safety Bureau

Copyright in material obtained from other agencies, private individuals or organisations, belongs to those agencies, individuals or organisations. Where you want to use their material you will need to contact them directly.

#### **Addendum**

Page	Change	Date

# Collision with terrain involving a Bell 206B, VH-BNG

## What happened

On 20 February 2014, at about 0605 Eastern Standard Time (EST), a Bell 206B helicopter, registered VH-BNG, took off from a banana plantation to conduct aerial spraying.

The pilot conducted pre-application checks including assessing the wind strength and direction, the position of the sun, identifying the area to be sprayed and any hazards.

The block was to be sprayed as soon as possible after first light and the pilot planned to conduct the spraying in an east-west direction. After about 5 minutes of spraying, some overspray accumulated on the windscreen, resembling a white paint. The pilot then noted that the on-board smoke generator indicated the wind had changed direction, so he flew the helicopter to the southern end of the block and resumed spraying into wind.

After completing spraying, the pilot commenced a return to the staging area. To comply with local noise abatement procedures, the pilot climbed the helicopter to about 250-300 ft above ground level (AGL) and established a flight path to avoid overflying noise-sensitive areas.

At about 0615, on descent to the staging area, when at about 150-200 ft AGL, the helicopter rotor blades collided with a tree, dislodged a branch, and the helicopter subsequently collided with terrain. The helicopter was substantially damaged and the pilot sustained serious injuries (Figure 1).

## ***Pilot comments***

The pilot of VH-BNG provided the following comments:

- He did not see the tree at any time.
- The helicopter was in a nose-high attitude on descent to the staging area, which caused a significant blind spot.
- There was some overspray on the windscreen, reducing the visibility through it.
- The helicopter was heading towards the south-east and glare from the rising sun further reduced visibility.
- He had taken off to the west, then turned to the north towards the block to be sprayed, so had not sighted the tree on departure. The return route however put the helicopter directly in line with the tree.

**Damage to VH-BNG**



Source: Operator

**Figure 1: Damage to VH-BNG and large tree strike**



Source: Operator

## General details

### Occurrence details

Date and time:	20 February 2014 – 0623 EST	
Occurrence category:	Accident	
Primary occurrence type:	Controlled flight into terrain	
Location:	Near Mission Beach, Queensland	
	Latitude: 17° 52.25' S	Longitude: 146° 06.42' E

### Helicopter details

Manufacturer and model:	Bell Helicopter Company 206B	
Registration:	VH-BNG	
Serial number:	580	
Type of operation:	Aerial agriculture	
Persons on board:	Crew – 1	Passengers – Nil
Injuries:	Crew – 1 (Serious)	Passengers – Nil
Damage:	Substantial	

## About the ATSB

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The ATSB is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers. The ATSB's function is to improve safety and public confidence in the aviation, marine and rail modes of transport through excellence in: independent investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; and fostering safety awareness, knowledge and action.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, relevant international agreements.

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

It is not a function of the ATSB to apportion blame or determine liability. At the same time, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, 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.