



Australian Government

Australian Transport Safety Bureau

Ground strike involving Robinson R44, VH-HHZ

74 km NE of Sleisbeck, Northern Territory, 18 November 2016

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Addendum

Page	Change	Date

Ground strike involving Robinson R44, VH-HHZ

What happened

On 18 November 2016, a Robinson R44 helicopter, registered VH-HHZ, was operating to support fire-fighting personnel near Sleisbeck, Northern Territory.

At about 1600 Central Standard Time (CST), the pilot conducted an approach to a landing site they had already landed at twice that day. The landing site was a flat rocky surface, but one side had a slight downwards slope. The pilot confirmed the wind direction from smoke nearby and approached the landing site into wind. As the pilot lowered the collective¹ and the helicopter's skids touched down, the helicopter started to slide to the right. The pilot attempted to correct the sideways movement, but the main rotor blade struck a rock, and the helicopter started vibrating. The pilot rolled off the throttle and applied right pedal, but the helicopter rotated to the left and the horizontal stabiliser struck a rock. The helicopter sustained substantial damage (Figure 1). The pilot and two passengers were not injured.

Figure 1: Accident site showing damage to VH-HHZ



Source: Helicopter operator

Findings

These findings should not be read as apportioning blame or liability to any particular organisation or individual.

¹ Collective: a primary helicopter flight control that simultaneously affects the pitch of all blades of a lifting rotor. Collective input is the main control for vertical velocity.

- The helicopter landed on a portion of rock, which had a slight downwards slope. The actions taken by the pilot, when the helicopter started to slide, did not prevent the main rotor blades and the horizontal stabiliser from striking a rock.

Safety action

Whether or not the ATSB identifies safety issues in the course of an investigation, relevant organisations may proactively initiate safety action in order to reduce their safety risk. The ATSB has been advised of the following safety action in response to this occurrence.

Helicopter operator

As a result of this occurrence, the helicopter operator has advised the ATSB that they are taking the following safety actions:

The company issued a notice to flight crew emphasising the importance of conducting a thorough aerial assessment before committing to landing at any remote location including confined areas.

The company also reminded pilots that in hot humid conditions, fatigue can occur a lot sooner than during the cooler months. They should make every effort to remain hydrated and inform the chief pilot immediately if they feel adversely affected.

Safety message

Civil Aviation Advisory Publication 92-2(2), [Guidelines for the establishment and operation of onshore Helicopter Landing Sites](#), sets out factors that may be used to assess the suitability of a site for helicopters to land and take off. The guidelines include the recommendation that helicopter operators conduct thorough risk and hazard assessments for a basic helicopter landing site and implement controls to manage identified hazards.

General details

Occurrence details

Date and time:	18 November 2016 – 1600 CST	
Occurrence category:	Accident	
Primary occurrence type:	Ground strike	
Location:	74 km NE of Sleisbeck, Northern Territory	
	Latitude: 13° 37.90' S	Longitude: 133° 03.13' E

Helicopter details

Manufacturer and model:	Robinson Helicopter Company R44	
Registration:	VH-HHZ	
Serial number:	2087	
Type of operation:	Charter – Passenger	
Persons on board:	Crew – 1	Passengers – 2
Injuries:	Crew – 0	Passengers – 0
Aircraft 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 operations involving the travelling public.

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.