

# Fuel exhaustion event involving a Hughes 269C, VH-HAK

55 km NE Launceston Aerodrome, Tasmania, 23 February 2014

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#### Addendum

Page	Change	Date

# Fuel exhaustion event involving a Hughes 269C, VH-HAK

## What happened

On 23 February 2014, a Hughes 269C helicopter, registered VH-HAK, was parked on a property about 55 km north-east of Launceston, Tasmania, beside a dam. The pilot had shut the helicopter down in that position about a week earlier, aware that it was low on fuel.

At about 0700 Eastern Daylight-savings Time (EDT), the pilot prepared for a short 200 m flight to reposition the helicopter to the other side of the dam, for refuelling. He conducted fuel drains, with no contaminants found.

#### VH-HAK



Source: Operator

The helicopter took off and climbed to about 20 ft above ground level. When about three quarters of the way across the dam, the engine stopped due to fuel exhaustion. The pilot conducted a forced landing onto the edge of the dam, with part of the helicopter sinking into the water and mud. The main rotor blades collided with the embankment resulting in substantial damage (Figure 1).

Figure 1: Damage to VH-HAK



Source: Operator

### Safety message

While experience and familiarity with operations are invaluable, they can also lead to complacency. It is therefore important that pilots with experience, familiarity and comfort with the aircraft and location, continue to do all checks thoroughly. The ATSB publication, *Avoidable Accidents No. 6 - Experience won't always save you*, is available at www.atsb.gov.au/publications/2012/avoidable-6-ar-2012-035.aspx.

On average, the ASTB receives 21 reports of fuel exhaustion or starvation occurrences each year. Seven per cent of the reported fuel starvation occurrences resulted in a collision with terrain. The ATSB publication *Avoidable Accidents No. 5 – Starved and exhausted: Fuel management aviation accidents* is available at <a href="https://www.atsb.gov.au/publications/2012/avoidable-5-ar-2011-112.aspx">www.atsb.gov.au/publications/2012/avoidable-5-ar-2011-112.aspx</a>.

#### General details

#### Occurrence details

Date and time:	23 February 2014 – 0700 EDT	
Occurrence category:	Accident	
Primary occurrence type:	Collision with terrain	
Location:	55 km NE Launceston aerodrome, Tasmania	
	Latitude: 41° 19.65' S	Longitude: 147° 48.32' E

#### Helicopter details

Manufacturer and model:	Hughes Helicopters 269C		
Registration:	VH-HAK		
Serial number:	311041		
Type of operation:	Aerial agriculture		
Persons on board:	Crew – 1	Passengers – Nil	
Injuries:	Crew – Nil	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.