



Australian Government

Australian Transport Safety Bureau

Wildlife strikes involving a Mooney M20J, VH-CYK

Hedlow (ALA), Queensland, 24 March 2013

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Addendum

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Wildlife strikes involving a Mooney M20J, VH-CYK

What happened

On 24 March 2013, at about 1615 Eastern Standard Time,¹ a Mooney M20J aircraft, registered VH-CYK, departed the Hedlow aeroplane landing area (ALA), Queensland on a private scenic flight. On board the aircraft were the pilot and two passengers.

On returning to Hedlow, at about 1725, the aircraft joined the circuit and a normal approach was conducted. The pilot commenced the flare² at about 10 ft above the runway, during which time one of the passengers commented about two large birds that had just taken flight from an area of long grass to the right of the runway. The pilot then saw a 'flash' to the right of the aircraft and he initiated a go-around.

One of the birds flew in front of the aircraft and struck the left wing. The pilot reported that the aircraft yawed slightly left and the left wing dropped; he applied opposite aileron to maintain wings level. He then momentarily looked inside the cockpit to confirm the engine controls were in the full forward position and when looking outside again, the pilot noticed that the aircraft had drifted to the right of the runway into an adjacent paddock.

As the pilot reached over to raise the landing gear lever, the aircraft's left wing struck a bull. The aircraft then landed in the paddock. The pilot shut down the aircraft and the occupants exited. The aircraft sustained substantial damage (Figure 1) from hitting the bull and one passenger received minor injuries. The bull was put down as a result of the injuries it sustained.

Figure 1: Aircraft damage



Source: Pilot

¹ Eastern Standard Time (EST) was Coordinated Universal Time (UTC) + 10 hours.

² The final nose-up of a landing aircraft to reduce the rate of descent to about zero at touchdown.

Bird attraction source

The pilot reported that, due to the recent rain, the grass surrounding the airstrip had not been mowed and was knee-high in length. The birds had been concealed by the grass. Also, there was a reasonable amount of low lying water in the paddock next to the runway.

Pilot comments

The pilot provided the following comments regarding the accident:

- With hindsight, he would have continued the landing. However, if the birds were observed earlier in the approach, he would have initiated a go-around earlier.
- As the aircraft was hangared at Hedlow, the pilot operated from the airstrip on a regular basis. The pilot stated that, even if you are familiar with an airstrip, you should consider conducting a precautionary pass over the runway to alarm animals away from the area.

Safety message

Wildlife strikes (birds and animals) resulting in aircraft damage present a significant hazard to the aviation industry.

Animal strikes can cause a relatively large amount of damage due to the size and mass of the animals involved. Research³ conducted by the ATSB identified a total of 340 animal strikes between 2002 and 2011. Of these, the damage level was known in 217 cases. There were 13 animal strikes resulting in serious damage, including six livestock strikes. Half of these livestock occurrences were related to aircraft flying into an aerodrome that may not have had a distinct separation from the surrounding environment, such as landing in paddocks or areas adjacent to grazing paddocks where fences did not exist or were inadequate.

In addition, the research showed that more than 25 per cent of birdstrikes in general aviation resulted in damage, with aircraft wings the most commonly damaged component.

While wildlife strikes represent an ongoing challenge, and will always be present, this accident highlights the need to be aware of the hazards that may potentially exist within the vicinity of the runway and the benefits of overflying to alarm wildlife.

General details

Manufacturer and model:	Mooney Aircraft Corporation M20J	
Registration:	VH-CYK	
Type of operation:	Private	
Occurrence category:	Accident	
Primary occurrence type:	Wildlife strike	
Location:	Hedlow (ALA), Queensland	
	Latitude: 23° 13.40' S	Longitude: 150° 36.32' E
Persons on board:	Crew – 1	Passengers – 2
Injuries:	Crew – Nil	Passengers – 1 (Minor)
Damage:	Substantial	

³ www.atsb.gov.au/publications/2012/ar-2012-031.aspx

About the ATSB

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The Bureau 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.