Australian Government
Australian Transport Safety Bureau

Hard landing involving Cessna P206B, VH-EGG

Monduran (ALA), Queensland, 29 August 2012

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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
Accident and incident notification: 1800 011 034 (24 hours)
Facsimile: 02 6247 3117, from overseas +61 2 6247 3117
Email: atsbinfo@atsb.gov.au
Internet: www.atsb.gov.au

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What happened

On 29 September 2012, a Cessna P206B aircraft, registered VH-EGG, departed Gympie on a private flight to Monduran, Queensland. On board the aircraft were the pilot and four passengers.

On arrival at the Monduran aeroplane landing area (ALA), the pilot noted the windsock was indicating gusty wind conditions, from about 310-320°, and elected to land on runway 02.

VH-EGG

Source: *Pilot*

When on the base and final legs of the circuit, the pilot reported that wind gusts in excess of 20 kts were experienced, along with moderate to severe turbulence.

During the landing, at about 10 ft above the runway, the flare[1] was commenced. Immediately after, a significant wind gust was experienced, resulting in a hard landing on the main landing gear. The aircraft bounced and the pilot applied a small amount of power in an attempt to regain control. A second wind gust of greater intensity then occurred. The aircraft stalled[2] and touched down hard, collapsing the nose landing gear. The pilot maintained directional control and the aircraft came to a stop.

The aircraft sustained damage to the propeller, nose landing gear and lower engine cowls (Figure 1).

Pilot comments

The pilot reported that, at the time, he was confident that he could conduct the approach and landing under the given wind conditions. However, in hindsight, he stated that he should have conducted a go-around.

Figure 1: VH-EGG and windsock indication

Source: *Pilot*

[1] The flare, also known as the roundout, is the final nose-up of a landing aircraft to reduce the rate of descent to about zero at touchdown.

[2] Stall (aerodynamic) is the term used when a wing is no longer producing enough lift to support an aircraft's weight.

Safety message

A go-around, the procedure for discontinuing an approach to land, is a standard manoeuvre performed when a pilot is not completely satisfied that the requirements are in place for a safe landing.

The need to conduct a go-around may occur at any stage during the approach and landing. However, the most critical go-around is one initiated very close to the ground[3]. Consequently, the sooner a condition that warrants a go-around is recognised, the safer the manoeuvre will be.

This incident highlights the importance of conducting a go-around as soon as landing conditions appear unfavourable.

Aircraft details

Manufacturer and model:	Cessna Aircraft Company P206B	
Registration:	VH-EGG	
Type of operation:	Private	
Location:	Monduran (ALA), Queensland	
Occurrence type:	Aircraft control	
Persons on board:	Crew – 1	Passengers – 4
Injuries:	Crew – Nil	Passengers – Nil
Damage:	Minor	

[3] FAA Airplane Flying Handbook, Chapter 9, Approaches and Landings: http://www.faa.gov/library/manuals/aircraft/airplane_handbook/media/faa-h-8083-3a-4of7.pdf

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.