

Hard landing involving a Cessna U206G, VH-UFT

Hicks Island (ALA), Queensland, 21 December 2013

ATSB Transport Safety Report

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Addendum

Page	Change	Date

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What happened

On 21 December 2013, at about 1230 Eastern Standard Time (EST), ¹ a Cessna U206G aircraft, registered VH-UFT, departed Weipa for a charter flight to Hicks Island aeroplane landing area (ALA), Queensland. On board were the pilot and five passengers.

At the time, there was scattered cloud at different levels, showers of rain and a strong south-easterly wind. The pilot elected to cruise at about 1,500 ft above mean sea level (AMSL) until within 20 to 25 NM of Hicks Island, when the pilot descended the aircraft to about 1,000 ft AMSL to remain clear of cloud.

Hicks Island (ALA)



Source: Google earth

From there, the cloud base was lower and after descending to about 500 ft above ground level (AGL), when about 20 NM from Hicks Island, the pilot was unable to conduct an approach to the aerodrome and opted to approach from the north. The pilot was again unable to continue the approach and remain in visual meteorological conditions (VMC) and attempted one more approach from the south. After another unsuccessful attempt at reaching Hicks Island, the pilot elected to hold for about 40 minutes. After that time, the weather had not improved and the aircraft diverted to Lockhart River aerodrome, flying over water to remain clear of cloud and terrain.

After refuelling and about 45 minutes on the ground at Lockhart River, the pilot was advised by personnel at Haggerstone Island (south of Hicks Island), that the weather had improved and that there were still showers in the area. The weather radar also displayed some white returns, indicating light showers in the area. At about 1520, the aircraft departed Lockhart River for Hicks Island, and about 30 minutes later, the pilot conducted an approach to runway 09. On the final stage of the approach, at about 200 ft AGL, the aircraft encountered windshear, resulting in some loss of height.

The pilot continued the approach and after the initial touchdown, the aircraft remained on the ground for about 3-4 m then became airborne and subsequently bounced. The nose landing gear then contacted the ground and detached from the aircraft (Figure 1). The aircraft came to a stop on the runway.

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

Figure 1: Damage to VH-UFT



Source: Operator

Pilot comments

The pilot provided the following comments:

- The pilot had 6.7 hours of flying experience in the Cessna 206 with the most recent flight 3 months earlier.
- Runway 09 at Hicks Island slopes up and then levels off and then slopes up again. The pilot
 had previously experienced that aircraft becoming momentarily airborne after the initial
 touchdown on the runway and another company pilot reported having the same experience.
- The pilot elected not to conduct a go-around after the aircraft became airborne because the bounce on landing was perceived to be normal for that runway.
- The landing did not seem hard enough to cause the nose landing gear to shear off.
- During the flight, when the aircraft encountered showers of rain, the water on the windscreen made it difficult to distinguish the cloud from the sea.
- The upslope of the runway gave the illusion that the aircraft was high on the approach.

Safety message

A go-around is the procedure for discontinuing an approach to land. It is a standard manoeuvre that is performed when the pilot is not completely satisfied that the requirements for a safe landing have been met.

The need to conduct a go-around may occur at any stage during the approach and landing phase, but according to the United States Federal Aviation Administration (FAA), the most critical go-around is one initiated when very close to the ground. Consequently, the sooner a condition that warrants a go-around is recognised, the safer the manoeuvre will be.

This incident is a reminder to pilots to be go-around ready.

The following links provide some useful information on go-arounds:

 Aviation safety explained – Go-arounds: <u>www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_91481</u>
 FAA Airplane Flying Handbook, Chapter 9, Approaches and Landings: www.faa.gov/library/manuals/aircraft/airplane_handbook/media/faa-h-8083-3a-4of7.pdf

General details

Occurrence details

Date and time:	21 December 2013 – 1545 EST		
Occurrence category:	Accident		
Primary occurrence type:	Hard landing		
Location:	Hicks Island (ALA), Queensland		
	Latitude: 11° 59.00' S	Longitude: 143° 16.00' E	

Aircraft details

Manufacturer and model:	Cessna Aircraft Company U206G		
Registration:	VH-UFT		
Serial number:	U20604593		
Type of operation:	Charter – passenger		
Persons on board:	Crew – 1	Passengers – 5	
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.