



Australian Government

Australian Transport Safety Bureau

Collision with terrain involving Grob G-115, VH-ZTM

Jandakot Airport, 15 March 2013

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Addendum

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Collision with terrain involving Grob G-115, VH-ZTM

What happened

On 15 March 2013, a student pilot was conducting solo circuit training at Jandakot Airport, Western Australia, in a Grob G-115C, registered VH-ZTM (ZTM).

At 1135 Western Standard Time,¹ on the student's third solo circuit to runway 06R, ZTM began to drift to the left of the runway centreline. The student elected to go-around and applied full power. Following the application of power, the nose pitched up abruptly and the aircraft then rolled to the left before pitching nose down. The left wing tip contacted the ground and the nose gear and right main gear collapsed before the aircraft came to a stop. The student pilot was able to exit the aircraft without injury, however the aircraft sustained substantial damage.

Grob G-115



Source: Operator

Weather

Weather observations were obtained from the Bureau of Meteorology with the following conditions observed:

- At 1130 – the wind was from the east north-east at 5 knots gusting 7 knots
- At 1200 – the wind was from the north-east at 5 knots gusting 7 knots

Pilot experience

The student had a total of 30.1 hours, all of which were on the Grob G-115. Earlier that day, the student had completed a dual check with an instructor of 1.1 hours duration. The dual check comprised of seven circuits, including normal approaches, flapless approaches and a glide approach. The student was assessed as competent to a solo standard.

Figure 1: Aircraft damage



¹ Western Standard Time was Coordinated Universal Time (UTC) + 8 hours.

Source: Operator

ATSB comment

The aircraft was reported to be in the landing configuration, with landing trim selected together with full flaps which is consistent with photographs taken shortly after the accident. The pitch up together with the reported roll and yaw is consistent with the application of full power, without adequate corrective control inputs being made to correct for the change in power setting. The rapid pitch down is consistent with one or both wings stalling.²

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 proactive safety action in response to this occurrence.

Flight Training School

As a result of this occurrence, the flight training school has advised the ATSB that they are taking the following safety actions:

- Increased emphasis on Stabilised Approach Criteria to be made during pre-flight briefings.
- Instructor training and standardisation to include more emphasis on the essential use of rudder.
- Inclusion on the training syllabus of an upper air exercise prior to first solo, to check student use of rudder and go-around procedures.
- A more detailed brief on landing technique, for the G115C, to be included in the standard operating procedures.

Safety message

A go-around is an aborted landing of an aircraft that is on final approach. The US Aircraft Owners and Pilots Association (AOPA) has identified that for the ten-year period, between 1994 and 2003, accidents that occurred during a go-around accounted for approximately 6 % of the total accident rate for general aviation.³ During a go-around the aircraft is trimmed for landing, not for going around and the pilot will need to be positive with attitude changes as power is applied.

For further reading on go-around technique please see:

US AOPA – Go around, do this if an approach or landing isn't working out.

flighttraining.aopa.org/students/presolo/skills/goaround.html

² An aerodynamic stall, is the term used when a wing is no longer producing enough lift to support an aircraft's weight.

³ *General Aviation Accidents – 10 Year Trend*, AOPA Foundation (2005).

General details

Manufacturer and model:	Grob - G-115 C2	
Registration:	VH-ZTM	
Type of operation:	Flying Training	
Occurrence category:	Accident	
Primary occurrence type:	Collision with terrain	
Location:	Jandakot Airport, Western Australia	
	Latitude: 32° 05.08' S	Longitude: 115° 52.09' E
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 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.