AAIB Bulletin: 3/2022	G-AVBT	AAIB-27460
ACCIDENT		
Aircraft Type and Registration:	Piper PA-28-180, G-AVBT	
No & Type of Engines:	1 Lycoming O-360-A4A piston engine	
Year of Manufacture:	1967 (Serial no: 28-3945)	
Date & Time (UTC):	9 July 2021 at 1033 hrs	
Location:	Mid Wales Airport, Welshpool, Powys	
Type of Flight:	Private	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Substantial damage to the landing gear and propeller	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	49 years	
Commander's Flying Experience:	314 hours (of which 21 were on type) Last 90 days - 1 hour Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Approximately 10 minutes into a training flight the main door started to open and the instructor made a few unsuccessful attempts to close it. During the approach and at approximately 150 m from the runway the aircraft lost altitude and struck a hedge.

History of the flight

The instructor was undertaking her first instructional flight, a trial lesson with a planned landaway at Mid-Wales Airport, Welshpool. Approximately 10 minutes into the flight, with the student flying, the main door started to open. The instructor made a few unsuccessful attempts to close it and then decided to continue to Welshpool as they understood the departure airfield was busy.

A straight-in approach was requested, and the instructor explained the approach procedure to the student. The aircraft was lined up with the runway centreline with the flaps extended and was stable at 67 kt. The student flew the approach with the instructor following through on the controls whilst holding the door closed. The instructor reported, at approximately 150 m from the runway the aircraft "lost lift and dropped, losing altitude, full power was immediately applied and the aircraft was pitched-up, but it kept descending, making a go-around impossible". The main landing gear stuck a hedge in the undershoot and detached. The aircraft came to rest about 200 m from the hedge and beside the runway.

Relevant safety information

The CAA Skyway Code, in the section entitled, General Aviation Risks, highlights distraction, such as an open door, as a risk that can lead to a loss of control. It states:

'The most important message is to fly the aircraft'

The Pilot's Operating Handbook for this aircraft does not include a procedure for an open door in flight, but later versions for similar aircraft do contain a procedure and operating advice in Section 3, Emergency Procedures as follows:

'3.31 OPEN DOOR

The cabin door is double latched, so the chances of its springing open in flight at both the top and side are remote. However, should you forget the upper latch, or not fully engage the side latch, the door may spring partially open. This will usually happen at takeoff or soon afterward. A partially open door will not affect normal flight characteristics, and a normal landing can be made with the door open.

If both upper and side latches are open, the door will trail slightly open, and airspeed will be reduced slightly.

To close the door in flight, slow the airplane to 87 KIAS, close the cabin vents and open the storm window. If the top latch is open, latch it. If the side latch is open, pull on the armrest while moving the latch handle to the latched position. If both latches are open, close the side latch then the top latch.'

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