Australian Government
Australian Transport Safety Bureau

Collision during landing involving a GA8 Gippsland Airvan, VH-XHV

Pinjarra Skydiving Airstrip, 19 km SSE of Murray Field Airport, Western Australia
24 August 2014

ATSB Transport Safety Report
Aviation Occurrence Investigation
AO-2014-143
Final – 23 December 2014

Released in accordance with section 25 of the *Transport Safety Investigation Act 2003*

Publishing information

Published by: Australian Transport Safety Bureau
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 (24 hours)
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

Addendum

Page	Change	Date

Collision during landing, involving a GA8 Gippsland Airvan, VH-XHV

What happened

Airvan VH-XHV damage

Source: Operator

On 24 August 2014, at about 1515 Western Standard Time, the pilot of a Gippsland Aeronautics Airvan aircraft, registered VH-XHV, had just completed a parachute drop and was on descent to land at the Pinjarra Skydiving Airstrip, Western Australia.

The wind, as measured by the Dropzone Safety Officer prior to this flight, was about 10 kt from the north-west.

At about 1,000 ft above the ground, the aircraft was configured for landing with full flap selected. The pilot reported that the airspeed was about 80 kt on base, and about 75 kt on final. Due to a local noise abatement requirement, the pilot flew a curved, slightly truncated approach onto final and the touchdown was further along the runway than usual. Realising that this would increase the landing roll, the pilot checked the runway ahead, and reported it appeared to be clear.

The pilot applied intermittent gentle pressure on the brakes, but was mindful of the potential for skidding on the gravel surface if too much braking was applied. As the Airvan approached the hangar area (Figure 1) the pilot noticed a Cessna 182 aircraft on its regular hard stand, and when a little closer again, noticed the operator's Classic Aircraft Corporation WACO YMF5 aircraft behind it (Figures 1 and 3). The left wing of the WACO was over the runway. Reluctant to apply any stronger brake pressure, the pilot applied left rudder to manoeuvre the Airvan around the WACO.

Almost immediately the right wing of the Airvan struck the left wing of the parked WACO and the Airvan spun rapidly. The propeller struck a parked trailer, and the left wing went through the window of an unoccupied 4WD vehicle, before coming to rest. During this sequence, at least two people on the ground had to expedite themselves from the vicinity. The pilot shut down the aircraft and, still in shock, remained in the aircraft while ground personnel moved the Airvan back from the vehicle. The pilot was not injured, however two people nearby sustained minor injuries. The Airvan and the WACO were both substantially damaged.

Figure 1: Apron area

Source: Operator

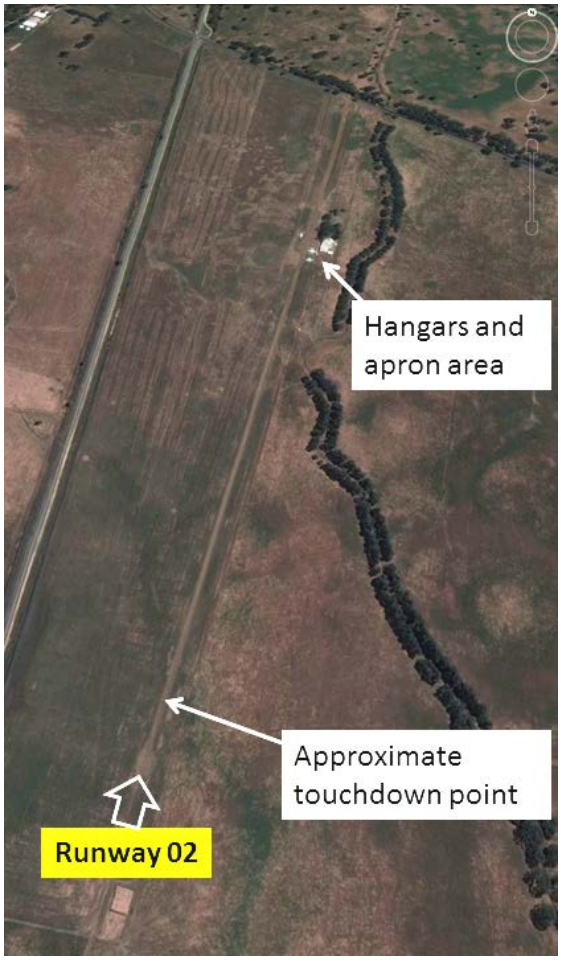
Pinjarra Skydiving Airstrip

Runway 02 is 1,250 m long, however depending on the operational need of the day, normally 836 m south of the hangars was kept for take-off and landings. The runway surface was compacted gravel.

There are two hangars located about 374 metres from the northern end of 02, set back about 26 m east of the runway centreline. The area between the hangars and the runway is apron area. In front of the hangars is a fenced off spectator area. On the eastern side of the runway, a spoon drain runs south from the hangars for about 170 m.

There is a displaced landing threshold for runway 20 about 60 m south of the apron hangar area.

Figure 2: Runway 02



Source: Google earth

Figure 3: Damaged Classic Aircraft Corporation WACO

Source: Operator

Pilot comments

The pilot had commenced duty at about 0800 WST. This was the last of six sorties flown in the Airvan and there had been two flown in the Cessna 182. On the previous day, the pilot had conducted a scenic flight around the Perth area. Duty time for this day had been about five hours.

The pilot reported that, in their opinion, the wind had picked up during the day, and there was light turbulence during the descent, hence five knots was added to the approach speed to compensate for these conditions.

The pilot advised the WACO had only been in front of the hangar since around midday, and had changed position from where it had been originally parked. The background clutter of personnel,

vehicles and aircraft on the apron area, meant the WACO was not clearly visible to the pilot until late in the landing roll. At this point, the pilot judged a go-around was no longer a safe option, and tried to manoeuvre the Airvan to the left around the WACO.

The pilot suggested that better communication from ground based operators to pilots in flight may have assisted in avoiding this accident.

Operator comments

The operator advised that the wind direction at the time of the accident was 330 degrees at 10 kt. A perceived increase in wind velocity resulted in the Dropzone Safety Officer taking a wind reading prior to allowing the flight to be dispatched; however as there was only one recorded gust over a twenty minute period, the flight departed.

The operator reported that the parachute drop was recorded on video, and there was no obvious gusts or turbulence noted or reported by the parachutists. The video also showed the Airvan moving at speed through the apron area just prior to the collision with the WACO.

He also advised that the paddock adjacent to the collision point would have been a suitable option to run off the runway if needed.

He feels a gust of wind may have resulted in the WACO weather-cocking, leaving the left wing closer to the runway centreline. He stated he was surprised that the much larger WACO was not visible from the runway.

Safety message

The differences in the recollection of events between the pilot and the operator on the day could not be reconciled.

There is agreement that the Airvan approached the apron area at a higher speed than any of the other landings that day, but there remains a difference in recollection and opinion on other points.

This accident still serves as an important reminder of the need to initiate a go-around as soon as there is doubt about the suitability of the approach and landing. In this instance, the pilot had assumed that the full length of the runway was available and had left the option of a safe go-around too late.

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 for a safe landing have been met. The need to conduct a go-around may occur at any point in the approach and landing phase, but the most critical go-around is one initiated close to the ground.

The following link provides some useful information on go-arounds: *Aviation safety explained-Go-arounds* www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_91481.

General details

Occurrence details

Date and time:	24 August 2014 – 1600 Western Standard Time	
Occurrence category:	Accident	
Primary occurrence type:	Collision with a parked aircraft	
Location:	Pinjarra Skydiving Airstrip 19 km SSE of Murray Field Airport, Western Australia	
	Latitude: 32° 40.73’ S	Longitude: 115° 52.98’ E

Aircraft details

Manufacturer and model:	Gippsland Aeronautics Pty Ltd GA8-TC 320	
Registration:	VH-XHV	
Serial number:	GA8-TC 320-10-158	
Type of operation:	Private – Parachute operations	
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 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.