Australian Government
Australian Transport Safety Bureau

# Collision with terrain during a go-around, involving a Cessna 206, VH-TND

Rawnsley Park ALA, South Australia, 2 August 2014

**ATSB Transport Safety Report**
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**Addendum**

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# Collision with terrain during a go-around, involving a Cessna 206, VH-TND

## What happened

**VH-TND accident site**

Source: South Australia Police

On 2 August 2014, the pilot arrived at Rawnsley Park aircraft landing area (ALA), South Australia to prepare for the first of three scenic flights scheduled that morning.

After completing the morning runway inspection, the pilot carried out a pre-flight inspection of the Cessna 206 aircraft, registered VH-TND (TND). The pilot had planned the flight, including checking weather information prior to arriving at the airstrip. As there is no terminal area forecast (TAF) service available for Rawnsley Park ALA, the pilot sourced a combination of weather information from area forecasts, synoptic charts, and the local weather at Hawker, an airstrip about 19 NM to the south-west.

After providing a safety briefing to the two passengers, the aircraft departed at about 0845 Central Standard Time (CST). During the departure from runway 03, the pilot reported there was an easterly crosswind of about 8 knots and that the conditions were calm throughout the 30 minute flight around Wilpena Pound.

On the return leg, the pilot elected to conduct a straight in approach onto runway 21. On mid final, with one stage of flap selected, the airspeed was about 80 knots, reducing to about 70 knots with full flap. There was still a crosswind of 8-10 knots from the east; however as the aircraft did not appear to be affected by this wind, the pilot did not compensate with aileron or rudder during the flare and touchdown. The landing was smooth, with the touchdown occurring about 150m past the threshold. The pilot retracted all stages of flap, and then applied light pressure to the brakes.

With about 50 knots of airspeed remaining, the aircraft began to veer to the left (Figure 1). In an attempt to re-align the aircraft with the runway, the pilot applied right rudder, but soon realised he was unable to correct the situation. He applied full power and initiated a go-around.

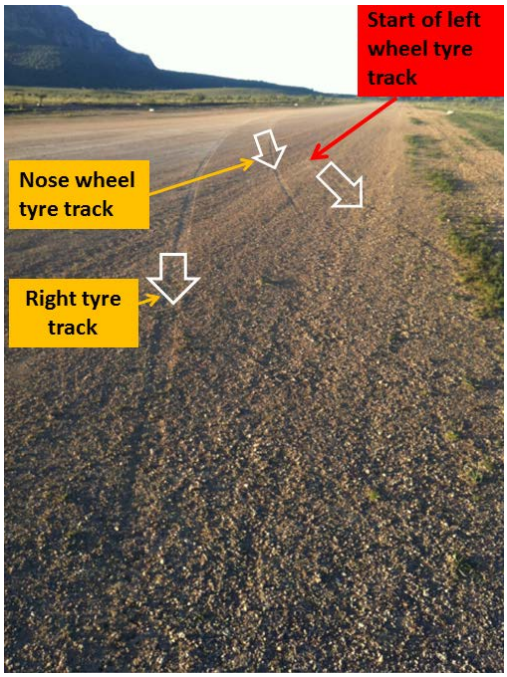
The aircraft continued toward a 45 cm high levee bank running parallel to the runway. The main wheels struck the levee bank, and the aircraft became airborne in a nose high, tail low attitude. In an attempt to clear a shrub (Figure 2), the pilot raised the nose of the aircraft. The aircraft horizontal stabiliser (Figure 3) struck the main trunk of the shrub about 45 cm above the ground, uprooting it.

Conscious of the need to maintain sufficient airspeed to prevent an aerodynamic stall, the pilot lowered the aircraft nose. The aircraft cleared a small tree. The pilot again raised the aircraft's nose in an attempt to clear the windsock.

As TND passed over the windsock, the pilot heard a 'clunk' and the aircraft 'wobbled'. Moments later, the aircraft spun rapidly to the left and collided with the ground (Figure 4). It came to rest about 18 m from the windsock (Figure 5). The pilot shut down the aircraft, and assisted the male passenger from the front left pilot door, then the female passenger from the rear door.

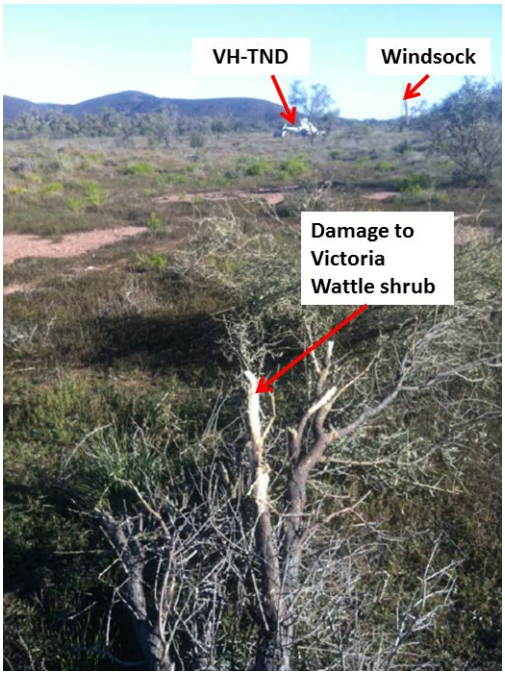
The male passenger sustained serious injuries, and the female passenger minor injuries. The pilot was not injured; however the aircraft was substantially damaged.

**Figure 1: VH-TND tyre tracks runway 21**




Source: Operator

**Figure 2: Shrub, aircraft and windsock**




Source: Operator

**Figure 3: Damage to horizontal stabiliser**


Source: Operator

**Figure 4: Rear fuselage and tail damage**


Source: South Australia Police

## *Rawnsley Park, Authorised Landing Area (ALA)*

The Rawnsley Park ALA consists of two light gravel runways, 03 and 21, each 1100 m in length. There is a 1°upslope on runway 03. The windsock is on the eastern side, about 300 m from the runway 03 threshold.

## *Pilot in command experience and recollection of events*

The pilot in command had about 316 hours total flying experience. Of this, about 79 hours had been gained on the Cessna 182, and about 42 hours on the Cessna 206 type aircraft.

The pilot had flown a Cessna182 aircraft for a previous seasonal job a few months earlier. He reported that this included coastal flying in strong crosswind conditions.

**Figure 5: VH-TND near windsock**

**Source: South Australia Police**

The pilot reported everything with the flight went well up until the aircraft began to veer left. During the go-around, he thought a wheel had struck the windsock. The pilot recalls little else from when the aircraft began to spin, until it came to rest and he was able to shut it down.

### *Operator report*

On 23 July 2014, the operator reported that the Chief Pilot had conducted a 1.9 hour flight check and locality familiarisation flight with the pilot in the aircraft. The check continued the following day, with crosswind circuits at Rawnsley Park ALA, and a short navigation exercise. The crosswind on this day was 15-20 knots from the west. The Chief Pilot reported no concern with the pilot's competency during the check flights.

## Safety Message

The following publications are available to assist General Aviation pilots:

The Civil Aviation Safety Authority (CASA) has available on their website a booklet and DVD looking at situational awareness. Chapter 6 specifically looks at Losing Situational Awareness.

This is available through CASA's online store: www.casa.gov.au

The European General Aviation Safety Team (EASA) published a Safety Promotion Leaflet on Decision Making for General Aviation Pilots.

This brochure is available at www.easa.europa.eu/essi/egast/2011/04/decision-making/

# General details

## *Occurrence details*

| | | |
|---|---|---|
| Date and time: | 2 August 2014 – 0900 CST | |
| Occurrence category: | Accident | |
| Primary occurrence type: | Collision with terrain | |
| Location: | Rawnsley Park ALA, South Australia | |
| | Latitude: 31° 39.00' S | Longitude: 138° 37.00' E |

## *Aircraft details*

| | | |
|---|---|---|
| Manufacturer and model: | Cessna Aircraft Company 206H | |
| Registration: | VH-TND | |
| Serial number: | 20608318 | |
| Type of operation: | Charter – passenger | |
| Persons on board: | Crew – 1 | Passengers –2 |
| Injuries: | Crew – Nil | Passengers –1 serious, 1 minor |
| 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.