



Australian Government

Australian Transport Safety Bureau

Collision with terrain involving Cessna 172N, VH-SQO

near Mulgathing, South Australia, on 27 June 2024

ATSB Transport Safety Report
Aviation Occurrence Investigation
AO-2024-037
Preliminary – 18 September 2024

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

Publishing information

Published by: Australian Transport Safety Bureau
Postal address: GPO Box 321, Canberra, ACT 2601
Office: 12 Moore Street, Canberra, ACT 2601
Telephone: 1800 020 616, from overseas +61 2 6257 2463
Accident and incident notification: 1800 011 034 (24 hours)
Email: atsbinfo@atsb.gov.au
Website: www.atsb.gov.au

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Addendum

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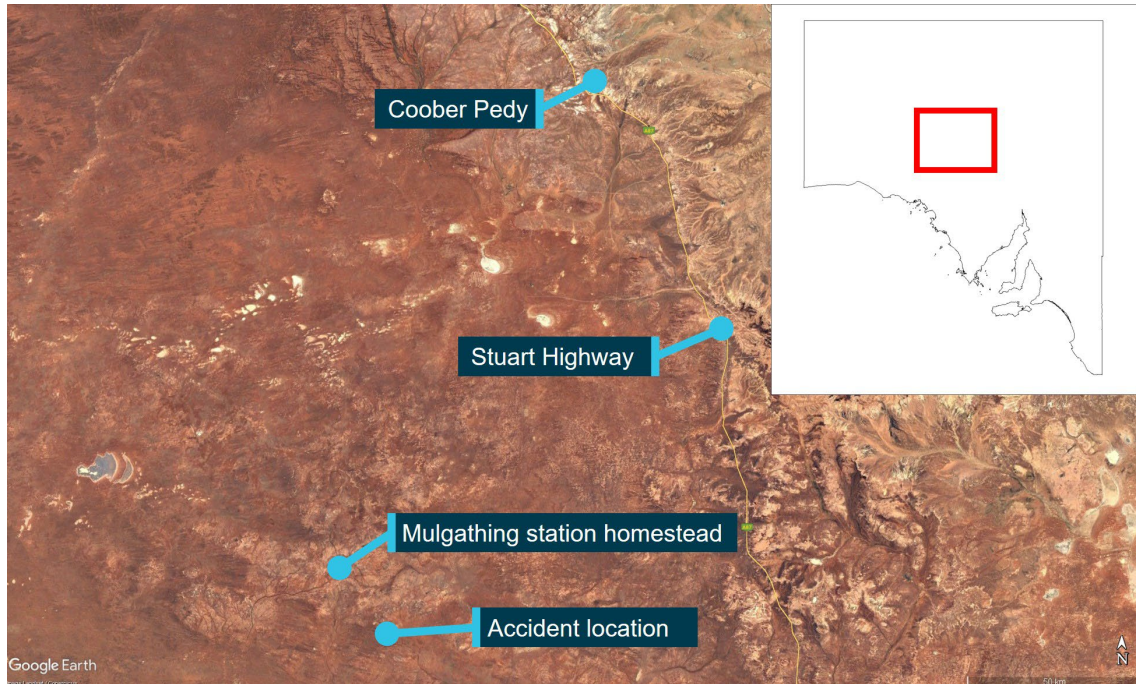
Preliminary report

This preliminary report details factual information established in the investigation’s early evidence collection phase, and has been prepared to provide timely information to the industry and public. Preliminary reports contain no analysis or findings, which will be detailed in the investigation’s final report. The information contained in this preliminary report is released in accordance with section 25 of the *Transport Safety Investigation Act 2003*.

The occurrence

On the morning of 27 June 2024, the pilot of a Cessna Aircraft Company 172N, registered VH-SQO, commenced sheep spotting operations at Mulgathing Station, South Australia (Figure 1). At about 0810 local time, a witness on a motorbike about 500 m away observed the aircraft dive down on what they presumed was a mob of sheep to an altitude of about 50 ft above the ground before climbing rapidly, turning to the left and then nosediving towards the ground. The aircraft was destroyed, and the pilot who was the sole occupant was fatally injured.

Figure 1: Accident location with reference to Coober Pedy and the Stuart Highway



Source: Google Earth, annotated by the ATSB

Context

Pilot information

The pilot, a New Zealand citizen, held a Civil Aviation Safety Authority Part 61 Commercial Pilot Licence (Aeroplane) with a single and multi-engine class rating with endorsements for retractable undercarriage, manual propeller pitch control, and low-level and instrument ratings. The pilot’s commercial licence was issued on 17 August 2023 in accordance with the *Trans-Tasman Mutual Recognition Act 1997*. The pilot held a Class 1 Aviation Medical Certificate with no restrictions, valid to 29 November 2024.

At the pilot’s last medical examination on 6 November 2023, the pilot reported having 251 hours of total aeronautical experience.

Aircraft information

VH-SQO was a Cessna Aircraft Company 172N 4-seat, single-engine, high (strut-braced) wing, all metal, unpressurised, fixed (tricycle) undercarriage aircraft. The aircraft was manufactured in the United States in 1978 and first registered in Australia on 29 August 1978. The operator had been the registered owner of the aircraft since the date of registry.

The current maintenance release was issued on 8 March 2024 and was valid until 8 March 2025 or 14,620.8 hours total time-in-service, whichever came first. At the time of take-off for the accident flight, the aircraft had accumulated 14,602.7 hours.

Meteorological information

Witnesses reported that on the morning of the accident, the weather was fine, clear and the temperature was cool, not cold. No wind or cloud cover was observed, and the conditions were described by a witness as being ‘almost perfect for paddock work’.

Wreckage examination

The ATSB’s onsite examination found that the aircraft impacted with terrain at about a 70° pitch down attitude, with ground impact marks directly under the nose showing no forward momentum (Figure 2). The aircraft’s flight controls and structure did not identify any pre-existing faults or pre-impact defects or failures. Additionally, one of the propeller blades showed significant rotational abrasion damage and chord-wise twisting indicating that the engine was driving the propeller under significant power at the time of impact.

Figure 2: VH-SQO accident site



Source: ATSB

Further investigation

To date, the ATSB has examined the aircraft wreckage, interviewed witnesses, and gathered electronic devices from the accident site. The investigation is continuing and will include consideration of the following:

- evaluation of witness information
- examination of the:
 - GPS device recovered from site
 - aircraft maintenance history
 - aircraft weight and balance, and performance

- meteorological conditions
- impact sequence and survivability
- the conduct of similar flight operations
- pilot qualifications, experience and medical information
- regulatory requirements for fixed-wing aerial mustering.

A final report will be released at the conclusion of the investigation. Should a critical safety issue be identified during the course of the investigation, the ATSB will immediately notify relevant parties so appropriate and timely safety action can be taken.

General details

Occurrence details

Date and time:	27 June 2024 – 0910 CST	
Occurrence class:	Accident	
Occurrence categories:	Collision with terrain	
Location:	near Mulgathing Station, South Australia	
	Latitude: -30.3987° S	Longitude: 134.1315° E

Aircraft details

Manufacturer and model:	Cessna Aircraft Company 172N	
Registration:	VH-SQO	
Operator:	Mulgathing Proprietary Limited	
Serial number:	1720255	
Type of operation:	Private	
Activity:	General aviation/recreational-Aerial work-Agricultural mustering	
Departure:	Mulgathing Station Homestead, South Australia	
Destination:	Mulgathing Station Homestead, South Australia	
Persons on board:	Crew – 1	Passengers – nil
Injuries:	Crew – 1 (fatal)	Passengers – nil
Aircraft damage:	Destroyed	

Australian Transport Safety Bureau

About the ATSB

The ATSB is an independent Commonwealth Government statutory agency. It is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers.

The ATSB's purpose is to improve the safety of, and public confidence in, aviation, rail and marine transport through:

- independent investigation of transport accidents and other safety occurrences
- safety data recording, analysis and research
- 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, as well as participating in overseas investigations involving Australian-registered aircraft and ships. It prioritises investigations that have the potential to deliver the greatest public benefit through improvements to transport safety.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, international agreements.

Purpose of safety investigations

The objective of a safety investigation is to enhance transport safety. This is done through:

- identifying safety issues and facilitating safety action to address those issues
- providing information about occurrences and their associated safety factors to facilitate learning within the transport industry.

It is not a function of the ATSB to apportion blame or provide a means for determining 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. The ATSB does not investigate for the purpose of taking administrative, regulatory or criminal action.

Terminology

An explanation of terminology used in ATSB investigation reports is available on the ATSB website. This includes terms such as occurrence, contributing factor, other factor that increased risk, and safety issue.