



Australian Government

Australian Transport Safety Bureau

Loss of ground control involving Air Tractor AT-502B, VH-FLH

Near Deniliquin, New South Wales, 21 October 2013

ATSB Transport Safety Report

Aviation Short Investigation

AO-2013-188

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Addendum

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Loss of ground control involving Air Tractor AT-502B, VH-FLH

What happened

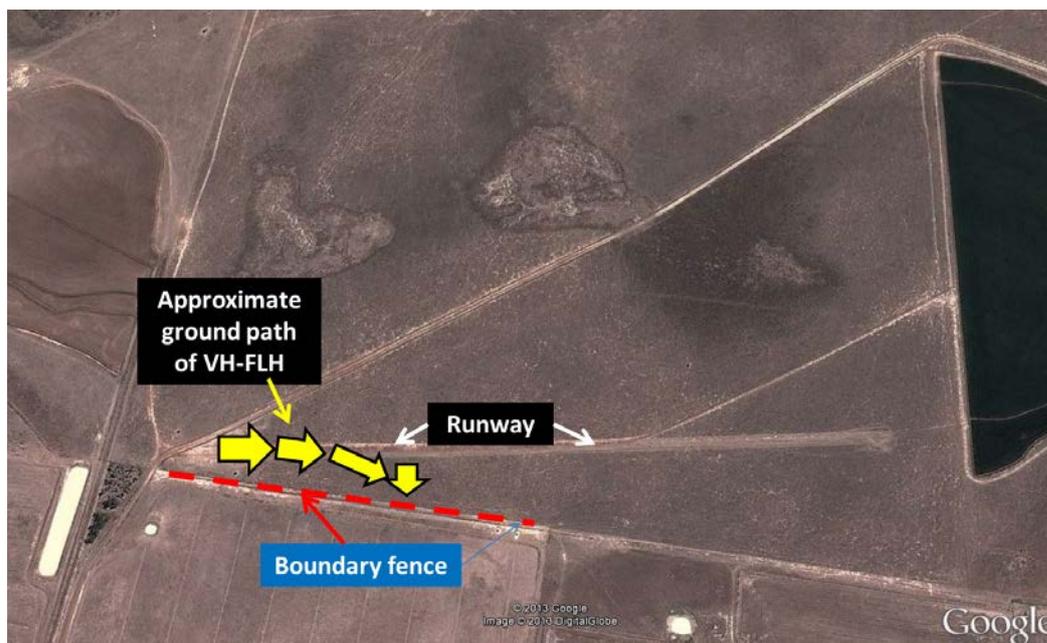
On 21 October 2013, an Air Tractor AT-502B aircraft, registered VH-FLH, was conducting rice sowing operations north-east of Deniliquin, New South Wales. The operation was supported by ground personnel who loaded the aircraft's hopper from a truck.

At about 1145 Eastern Daylight-savings Time (EDT),¹ the pilot was conducting his fourth landing for the day onto the property airstrip located about 11 NM north-east of Deniliquin Airport. Each of the sowing runs took about 6-8 minutes to complete. After each landing, the truck refilled the aircraft with about 850 kg of rice seed. For this landing, the truck was located near the threshold at the eastern end of the runway.

The pilot reported that the approach was normal, at an airspeed of about 58-60 kt, with a predominantly south-west wind of about 5-8 kt. The wind fluctuated between the west and south, but remained light.

During the landing, the main wheels touched down first, followed by the tail, which was locked into place. Shortly after, the aircraft suddenly veered right about 45°. The pilot considered a go-around, but was concerned that the aircraft would not clear the boundary fence (Figure 1). Consequently, he elected to continue the landing and selected reverse thrust, applied left brake, left rudder and left aileron in an attempt to re-align the aircraft with the runway. The aircraft did not slow down as the pilot expected. The wheels began to 'grab' and the left undercarriage leg became detached which caused the aircraft to rotate facing about 90° away from the runway. The left wingtip and propeller subsequently contacted the ground. The pilot shut down the aircraft and exited. The pilot was not injured, but the aircraft was substantially damaged (Figure 2).

Figure 1: Accident site



Source: Google earth

¹ Eastern Daylight-savings Time (EDT) was Coordinated Universal Time (UTC) + 11 hours.

Figure 2: Damage to VH-FLH



Source: Operator



Source: Operator

Airstrip information

The airstrip was east-west in orientation and about 964 m long. As it was located in a paddock, it had a relatively flat and firm surface with a boundary fence running along the southern side of the strip (Figure 1).

Pilot experience and comments

The pilot had over 7,750 flight hours with more than 3,850 on Air Tractor type aircraft. All his commercial flying experience has been in the agricultural industry.

The pilot provided the following comments regarding the accident:

- He was surprised that the aircraft veered to the right as the previous three landings at the airstrip, in the last 30 minutes, had been without issue.
- He had considered conducting a go-around as soon as the aircraft commenced veering right, but had concerns regarding the aircraft's ability to safely clear the fence. He felt he had the situation under control until it veered further.
- He believed that the aircraft had experienced a wind gust during landing, which may have contributed to the accident.

Operator comments

A post-accident engineering inspection conducted by the operator did not identify any mechanical issues with the aircraft. The operator suggested that a sudden wind gust may have contributed to the accident, or that a brake may have locked during the landing.

ATSB comment

Based on the information provided, the Australian Transport Safety Bureau (ATSB) was unable to determine what led to the loss of ground control.

General details

Occurrence details

Date and time:	21 October 2013 – 1145 EDT	
Occurrence category:	Accident	
Primary occurrence type:	Loss of ground control	
Location:	20 km NE of Deniliquin, New South Wales	
	Latitude: 35° 24.55' S	Longitude: 145° 04.51' E

Aircraft details

Manufacturer and model:	Air Tractor Inc. AT-502B	
Registration:	VH-FLH	
Serial number:	502B-2835	
Type of operation:	Aerial work	
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.