



Australian Government

Australian Transport Safety Bureau

Collision with terrain involving a Grumman G-164A, VH-CCF

18 km N of Deniliquin aerodrome, New South Wales, 31 December 2013

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Addendum

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Collision with terrain involving a Grumman G-164A, VH-CCF

What happened

On 31 December 2013, at about 1230 Eastern Daylight-savings Time (EDT),¹ a Grumman G-164A aircraft, registered VH-CCF, took off to the west, from an airstrip about 18 km north of Deniliquin, New South Wales, to conduct aerial spreading operations.

The pilot reported applying a higher power setting than normal for take-off to allow for the warm temperature (about 25 °C) and short airstrip. When at about 150 ft above ground level (AGL), the pilot levelled the aircraft off and commenced a right turn towards the north. During the turn, the pilot felt the aircraft sink. The pilot rolled the wings level and elected not to jettison the fertilizer load at that time as the aircraft normally stopped sinking once the wings were level. However, the aircraft continued to sink and the pilot then jettisoned the load.

When at about 20-30 ft AGL, with a nose high attitude, the pilot felt the aircraft's wings shaking, indicating an imminent stall.² The pilot increased engine power in an attempt to avert the stall, but the aircraft continued to descend. Shortly after, the wheels touched down in a rice paddy in about 20 cm of water and the aircraft flipped over (Figure 1). The aircraft was substantially damaged. The pilot was uninjured.

Figure 1: Damage to VH-CCF



Source: Pilot

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

² Stall (aerodynamic) is the term used when a wing is no longer producing enough lift to support an aircraft's weight.

Pilot comments

The pilot provided the following comments:

- Normally when the load was jettisoned, the aircraft ballooned and the pilot then lowered the nose to regain airspeed. On this day the aircraft continued to sink.
- The aircraft was loaded with about 450 kg of fertilizer; well below the maximum operating weight for the conditions.
- The wind was a light and gusty southerly. The pilot would normally turn the aircraft into wind after the initial climb, but as there were trees to the south of the airstrip, the pilot elected to turn downwind towards a clear area. It was possible that the aircraft may have encountered a downdraft.

General details

Occurrence details

Date and time:	31 December 2013 – 1230 EDT	
Occurrence category:	Accident	
Primary occurrence type:	Collision with terrain	
Location:	18 km N of Deniliquin aerodrome, New South Wales	
	Latitude: 35° 23.83' S	Longitude: 144° 56.97' E

Aircraft details

Manufacturer and model:	Grumman American Aviation Corporation G-164A	
Registration:	VH-CCF	
Serial number:	1105	
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.