

**Aviation Safety Investigation Report  
199700157**

**Amateur Built Aircraft  
Starlet**

**19 January 1997**

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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**NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).**

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

**Occurrence Number:** 199700157                      **Occurrence Type:** Accident  
**Location:** 18km N Albany, Aerodrome  
**State:** WA                      **Inv Category:** 4  
**Date:** Sunday 19 January 1997  
**Time:** 1140 hours                      **Time Zone** WST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Amateur Built Aircraft  
**Aircraft Model:** CJ-1  
**Aircraft Registration:** VH-CKM                      **Serial Number:** W18  
**Type of Operation:** Non-commercial Pleasure/Travel  
**Damage to Aircraft:** Substantial  
**Departure Point:** Albany WA  
**Departure Time:** 1100 WST  
**Destination:** Manjimup WA

**Crew Details:**

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Private	40.0	500

**Approved for Release:** Friday, April 4, 1997

The pilot reported that while flying at 4,000 ft, engine operation began to deteriorate. Initially this was manifested by intermittent coughing/missing but over the next few minutes RPM and power output decreased to the point where altitude could no longer be maintained. Engine instrument indications were all normal and throttle movement or carburettor heat application did not rectify the problem.

The engine finally lost all power and the pilot was committed to a forced landing. The aircraft finally came to rest in a rough rock strewn paddock, with substantial damage to the right main landing gear support structure.

A subsequent inspection of the engine revealed no internal faults that could have contributed to the power loss. However, the engineer who conducted the engine strip had been associated with the aircraft for a number of years. He said that the engine has no oil cooler and tends to overheat especially on hot days or with too lean a mixture. The carburettor/associated fuel lines are located such that when the engine does overheat, the system is highly susceptible to fuel vapourisation. In the absence of any other obvious reason for the failure, it was his opinion that the power loss was due to fuel vapourisation.