

**Aviation Safety Investigation Report  
199603738**

**Lockheed Aircraft Corp  
Ventura**

**18 November 1996**

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.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

**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:** 199603738                      **Occurrence Type:** Accident  
**Location:** 3km SE Richmond  
**State:** NSW    **Inv Category:** 4  
**Date:** Monday 18 November 1996  
**Time:** 1335 hours                                      **Time Zone**                      ESuT  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Lockheed Aircraft Corp  
**Aircraft Model:** PV-1  
**Aircraft Registration:** VH-SFF                      **Serial Number:** 33369  
**Type of Operation:** Commercial      Other  
**Damage to Aircraft:** Substantial  
**Departure Point:** Richmond NSW  
**Departure Time:**  
**Destination:** Richmond NSW

**Crew Details:**

<b>Role</b>	<b>Class of Licence</b>	<b>Hours on Type</b>	<b>Hours Total</b>
Pilot-In-Command	ATPL 1st Class	25.1	11444

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

The aircraft was approaching to land after completing a handling display during an Open Day at RAAF Richmond. At an altitude of about 800ft, on the base leg for runway 28, both engines stopped simultaneously and without warning. As there was insufficient altitude to reach the field for a power off landing, the flaps and landing gear were retracted and a successful forced landing carried out into a cleared field short of the airfield. The crew evacuated the aircraft without injury.

A subsequent investigation failed to positively determine the cause of the simultaneous stoppage of both engines. A large quantity of fuel remained in the tanks and no defects were found with either of the engine fuel systems. The engine ignition systems were tested and functioned normally after the accident.

The design of this aircraft, as with other ex-military multi-reciprocating engine types, includes a master ignition switch. The switch is guarded, and when turned off results in the termination of ignition to all engines simultaneously. The switch was removed from the aircraft after the accident and subjected to extensive testing, including vibration tests, but could not be faulted. It was noted however that ignition isolation resulted with only a small movement of the switch from the ON position.

The most likely reason for the sudden stoppage of both engines was movement of the master ignition switch from the ON position, possibly as the result of vibration or by a crew member inadvertently bumping the switch prior to landing.

**SAFETY ACTION:**

The Bureau of Air Safety Investigation drew the attention of the Civil Aviation Safety Authority to the fact that master ignition switches may still be fitted in older ex-military multi piston-engined aircraft, such as DC3s, on the civil register.

