

**Aviation Safety Investigation Report
199401102**

**Cessna Aircraft Company
Aerobat**

23 April 1994

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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.

Occurrence Number: 199401102 **Occurrence Type:** Accident
Location: Redcliffe
State: QLD **Inv Category:** 4
Date: Saturday 23 April 1994
Time: 1141 hours **Time Zone** EST
Highest Injury Level: Minor
Injuries:

	Fatal	Serious	Minor	None	Total
Crew	0	0	1	0	1
Ground	0	0	0	0	0
Passenger	0	0	1	0	1
Total	0	0	2	0	2

Aircraft Manufacturer: Cessna Aircraft Company
Aircraft Model: A152
Aircraft Registration: VH-IVW **Serial Number:** A1520839
Type of Operation: Instructional Dual
Damage to Aircraft: Substantial
Departure Point: Redcliffe QLD
Departure Time: 1100 EST
Destination: Redcliffe QLD

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Commercial	800.0	1600

Approved for Release: Friday, September 23, 1994

The instructor and student were conducting crosswind training circuits on runway 07 at Redcliffe. At approximately 200 ft AGL after takeoff on the third circuit, the engine began to run very roughly. The instructor immediately assumed control and transmitted a Mayday call. A decision was then taken to carry out a landing, onto the clear swampy terrain, straight ahead. The aircraft nosed over soon after touching down onto the soft surface. Both occupants were able to exit the aircraft without assistance.

The investigation found that the number 4 engine cylinder had a large fatigue crack in the non-finned base area, that extended approximately two thirds the circumference of the cylinder wall. No other defect was found with the engine, accessories or engine control systems that would have contributed to the rough running.

It is probable that the rough running was caused by excessive valve clearances and/or piston to cylinder binding, as the crack opened under load.



