

**Aviation Safety Investigation Report
199003051**

Airtractor AT301

7 March 1990

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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: 199003051 **Occurrence Type:** Accident

Location: 5km W St George QLD

Date: 7 March 1990 **Time:** 845

Highest Injury Level: Nil

Injuries:

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

Aircraft Details: Airtractor AT301

Registration: VH-LDJ

Serial Number: 301-0555

Operation Type: Aerial Work

Damage Level: Substantial

Departure Point: St George QLD

Departure Time: 0830

Destination: St George QLD

Approved for Release: 4th June 1990

Circumstances:

The pilot reported that the aircraft was part way along a spray run when he heard a change in the engine noise which he described as a hissing/tapping sound. He completed the run but, when the noise increased during the procedure turn, he elected to land the aircraft on a dirt access road between two crops. The aircraft landed with a wind of about 10 knots from the right rear quarter. Shortly after touchdown, the pilot swerved the aircraft to avoid a post. The pilot then experienced directional control difficulties and the right main wheel entered soft ground at the edge of the central road surface. This caused the aircraft to swing right and enter the crop. As both main wheels encountered the cultivation, the aircraft nosed over and a fire began in the engine compartment. The cockpit roof was embedded in soft soil. This prevented the pilot opening either door. However, he was able to egress from the cockpit by kicking out the perspex panel in the left side door. An inspection of the engine revealed that the exhaust pipe from Numbers 1 and 9 cylinders had come loose and was free to rattle and allow exhaust gases to escape past the respective cylinder flanges. This would have caused the noise as described by the pilot. The brass nuts which secure the exhaust to the cylinder head were not found. However, the cylinder head exhaust studs showed witness marks which indicated that neither nut had been in place at impact.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. For reasons which were not established, the numbers 1 and 9 cylinder exhaust pipes were not secured to their respective cylinder flanges.
2. Noise from the loose exhaust pipes and escaping exhaust gases attracted the pilot's attention.

3. The pilot elected to land as soon as possible.

4. The pilot lost directional control of the aircraft during the landing roll. Bureau of Air Safety Investigation