

**Aviation Safety Investigation Report
198701440**

Airtractor AT301

20 August 1987

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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: 198701440

Occurrence Type: Accident

Location: 10 km E of Corryong VIC

Date: 20 August 1987

Time: 1410

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:

Serial Number: 301-0622

Operation Type: Aerial Work (Agricultural
Spraying)

Damage Level: Substantial

Departure Point: Corryong VIC

Departure Time: 1410

Destination: Corryong VIC

Approved for Release: 27 January 1988

Circumstances:

The pilot was spraying a pine forest in hilly country. The spray runs were made in the downhill direction only, which required a low power setting during application. When the pilot applied power at the end of a particular run, engine roughness was noticed. He attempted to return to the DEPARTURE aerodrome, but the engine performance deteriorated to the point where a precautionary landing became necessary. The only suitable area was a short stretch of road, and the pilot was forced to apply heavy braking after touchdown. The tail lifted, allowing the propeller to strike the ground, and the aircraft overturned. Investigation established that the head had separated from one of the cylinders, as a result of fatigue cracking. No abnormalities were found in the casting material of the cylinder which might have explained the onset of the fatigue. It was possible that the cracking resulted from damage caused by excessive manifold pressure and/or cylinder head temperatures applied during previous operations.