

**Aviation Safety Investigation Report
199602712**

**Piper Aircraft Corp
Pawnee Brave**

29 August 1996

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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: 199602712 **Occurrence Type:** Accident
Location: 10km S Ardlethan
State: NSW **Inv Category:** 4
Date: Thursday 29 August 1996
Time: 0930 hours **Time Zone:** EST
Highest Injury Level: None

Aircraft Manufacturer: Piper Aircraft Corp
Aircraft Model: PA-36-375
Aircraft Registration: VH-OOZ **Serial Number:** 36-7660127
Type of Operation: Commercial Aerial Agriculture - Other
Damage to Aircraft: Destroyed
Departure Point: 'Uley' Ardlethan NSW
Departure Time:
Destination: 'Uley' Ardlethan NSW

Crew Details:

Role	Class of Licence	Hours on	
		Type	Hours Total
Pilot-In-Command	Commercial	2000.0	6100

Approved for Release: Monday, October 14, 1996

The pilot of the Pawnee Brave was conducting a procedure turn to the right, at the end of a spray run. At a height of about 150 ft he heard a loud bang, felt the aircraft shudder, and saw flames passing down the left side of the engine cowling. From the apex of the turn, at a height of about 250 ft, the pilot elected to land in an open field adjacent to the wheat crop he had been spraying. He kept the engine running, as it was still developing some power, until the landing was assured. Before he had crossed the boundary fence, the cockpit had started to fill with smoke.

Once the landing was assured, the pilot completed the emergency shut down checks and landed. His vision was obscured by engine oil on the windscreen, smoke in the cockpit and flames and smoke outside the aircraft. After landing, the pilot found that directional control and braking were hampered due to the left brake failing. Once the aircraft had stopped the pilot was able to escape safely, but was unable to extinguish the fire with the portable fire extinguisher. The aircraft was totally burnt out within 30 minutes.

A subsequent examination of the wreckage found that a cylinder had separated on the left side of the engine, fracturing a fuel injector line. Fuel had sprayed onto an adjacent high tension ignition lead conductor, which was shorting to the sparkplug body. The left brake failed due to the airborne fire burning through a flexible hydraulic brake line.

