Aviation Safety Investigation Report 198503542

Cessna 172N

22 November 1985

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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 <u>www.atsb.gov.au</u>.

Occurrence Number: Location: Date: Highest Injury Level: Injuries:		Tebin Station 32km SSW of Quilp 22 November 1985			Occurrence Type: Accident ie QLD Time: 1029 [Aprx]	
J			Fatal	Serious	Minor	None
		Crew	0	0	1	1
		Ground	0	0	0	-
		Passenger	0	0	0	3
		Total	0	0	0	4
Aircraft Details: Registration: Serial Number: Operation Type: Damage Level: Departure Point: Departure Time: Destination:	VH-UW Private Substan Tebin S	VD tial tation QLD sprx]				

Approved for Release: April 23rd 1986

Circumstances:

At about 200 feet agl after take-off, the engine began to vibrate and lose power. The pilot turned the aircraft to the right to position over more suitable terrain. The aircraft was stalled into small trees and bushes before touching down heavily on the nosewheel, which broke off. The aircraft then overturned and came to rest inverted. The power loss was caused by two engine exhaust valves sticking open. Although the valves were found to have been set at the minimum recommended clearance, a build up of combustion residue was present which probably restricted valve movement. Operations in high ambient temperatures involving slow flight and reduced engine cooling at rich mixtures can promote a combustion residue build up reducing valve guide clearance and resulting in valve sticking. The aircraft had been operating in the western Queensland summer conducting sheep survey operations.