



COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No

SI/792/1087

Publication of this report is authorised by the Secretary under the provisions of Air Navigation Regulations 283 (1)

1. LOCATION OF OCCURRENCE

27 km south of Captain's Flat, NSW	Height a.m.s.l. 3475 feet	Date 6.12.79	Time (Local) 1730 hours	Zone ESuT
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2. THE AIRCRAFT

Make and Model De Havilland DHC-2	Registration VH-MLB	Certificate of Airworthiness Valid from 22.4.1977
Certificate of Registration issued to	Operator	Degree of damage to aircraft Destroyed
		Other property damaged Nil
Defects discovered Pre-existing cracks in vertical stabiliser attachment fittings.		

3. THE FLIGHT

Last or intended departure point Agricultural Strip	Time of departure 1720 hours	Next point of intended landing Agricultural Strip	Purpose of flight Superphosphate Spreading	Class of operation Aerial Work
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4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
	Pilot	30	Commercial	599	8646	Fatal

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Name	Status	Degree of injury
Nil					

6. RELEVANT EVENTS

The pilot had been spreading superphosphate on a number of adjacent properties since about 0730 hours. At approximately 1630 hours he landed to refuel the aircraft and load the remaining superphosphate at the strip. His intention was to make one final spreading run and then position the aircraft at another nearby agricultural strip in preparation for further operations.

At 1730 hours the aircraft was observed completing a spreading run, from east to west, at a height of approximately 300 feet above ground level. An object was then seen to fall from the aircraft. The aircraft briefly oscillated and then dived steeply to the ground. A fire broke out on impact.

Examination of the wreckage established that the vertical stabilizer had separated from the aircraft in flight. This would have rendered the aircraft uncontrollable. Both right and left rear vertical stabiliser attachment fittings contained overload cracks that, by the degree of corrosion on the crack faces, had been present for a considerable period of time. The right rear fitting had then been further weakened by fatigue cracking, until it completely failed under operating loads. The left rear fitting had then also failed under the operating loads, allowing the vertical stabilizer to separate.

The aircraft had sustained damage on a number of occasions during its life. Each time it had been repaired, all observed damaged components had been replaced. In addition, the maintenance records indicated that all required maintenance and inspections of the tail plane had been carried out in accordance with the prescribed procedures. It was not established when or by what means the initial damage to the attachment fittings had been sustained.

7. OPINION AS TO CAUSE

The cause of the accident was that prior damage to the vertical stabilizer attachment fittings, which occurred at a time and under circumstances that were not established, was not subsequently detected.

Approved for publication	 (G.V. Hughes) Delegate of the Secretary	Date 4.5.1981
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