

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

AS/705/1017

1. LOCATION OF OCCURRENCE

8½ miles south east of Moora, Western Australia	Height a.m.s.l. (ft) 600 feet	Date 16.4.70	Time (Local) 1420	Zone WST
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THE AIRCRAFT

Make and Model Cessna 185A	Registration VH-AGK	Certificate of Airworthiness	Valid from 9.4.65	Valid to 8.4.74
Registered Owner Agricultural & General Aviation Pty. Ltd. P.O. Box 37, Applecross, Western Australia.	Operator Agricultural & General Aviation Pty. Ltd., P.O. Box 37, Applecross, Western Australia.	Degree of damage to aircraft Substantial	Other property damaged Nil	

Defects discovered

Fatigue crack in left main undercarriage leg at bend radius adjacent to fuselage skin.

3. THE FLIGHT

Last or intended departure point Agricultural Strip	Time of departure 1415	Next point of intended landing Point of departure	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
Brian STANAWAY	Pilot	33	Commercial	2755	3977	Nil

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

Name	Status	Degree of injury	Name	Status	Degree of injury

6. CONTRAVENTIONS OF REGULATIONS AND ORDERS

Regulation or Order No.	Nature of contravention

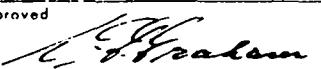
RELEVANT EVENTS

On the 38th landing since commencing work that day the aircraft made a three point landing with the hopper open and empty and full flap lowered. As the aircraft touched down the port undercarriage main spring leg fractured eight inches from the inboard end at the bend radius. The port wing dropped and after travelling about 300 feet the pilot was unable to maintain control of the aircraft, which commenced turning and sliding to the left and turned through 180 degrees before coming to rest 525 feet after touch down.

Examination of the broken undercarriage leg suggests that the quality of the shot peening of the component, a possible small material defect and the presence of light surface corrosion may all have been factors in the initiation of a fatigue crack which led to the eventual failure of the leg.

8. OPINION AS TO CAUSE

The cause of the accident was that the undercarriage spring leg failed at a point weakened by fatigue cracking.

Report approved  (D.S. GRAHAM)	Designation Assistant Director-General (Air Safety Investigation)	Date 3.2.1971
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DEFINITIONS

ACCIDENT - An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all those persons have disembarked and in which

- (a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached to the aircraft; or
- (b) the aircraft suffers substantial damage.

FATAL INJURY - Any injury which results in death within 30 days.

SERIOUS INJURY - Any injury other than a fatal injury which

- (a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or
- (b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- (c) involves lacerations which cause severe haemorrhages, nerve, muscle or tendon damage; or
- (d) involves injury to any internal organ; or
- (e) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

MINOR INJURY - Any injury other than as defined under "Fatal Injury" or "Serious Injury".

DESTROYED - Consumed by fire, demolished or damaged beyond repair.

SUBSTANTIAL DAMAGE - Damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and which would normally require major repair or replacement of the affected component. The following types of damage are specifically excluded: engine failure, damage limited to an engine, bent fairings or cowlings, dented skin, small punctured holes in the skin or fabric, taxi-ing damage to propeller blades, damage to tyres, engine accessories, brakes, or wingtips.

MINOR DAMAGE - Damage other than as defined under "Destroyed" or "Substantial Damage".