

1. LOCATION OF OCCURRENCE

A.A.F. Base, Pearce, Western Australia	Height a.m.s.l. (ft) 120 feet	Date 15.2.70	Time (Local) 1020	Zone WST
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2. THE AIRCRAFT

Make and Model ES 52/1 "Kookaburra" Glider	Registration VH-GHS	Certificate of Airworthiness	Valid from 17.8.69	Valid to 16.8.72
Registered Owner R.A.A.F. Pearce Gliding Club, R.A.A.F. Base, Pearce, W.A.	Operator R.A.A.F. Pearce Gliding Club, R.A.A.F. Base, Pearce, W.A.	Degree of damage to aircraft Substantial		
Defects discovered		Other property damaged		

3. THE FLIGHT

Last or intended departure point Pearce - Runway 18	Time of departure 1020	Next point of intended landing Pearce - Runway 05	Purpose of flight Glider Training	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
Denis Patrick MACNEALL	Assistant Instructor	24	Private Silver C Gliding Certificate	19	81 81	Nil

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

Name	Status	Degree of injury	Name	Status	Degree of injury
Master Raymond JAGER	Student Pilot	Minor			

6. CONTRAVENTIONS OF REGULATIONS AND ORDERS

Regulation or Order No.	Nature of contravention
A.N.R. 227 (1)	A take-off and flight was attempted at a weight which was in excess of the maximum permissible all up weight as specified in the Certificate of Airworthiness for the aircraft.

7. RELEVANT EVENTS

The glider was prepared for a winch launch on Runway 18, using 5000 feet of cable. By the time the glider was ready for launching the wind had backed from 180 degrees to approximately 090 degrees, with a mean speed of 14 knots. The instructor appreciated this and planned to land on Runway 05 for subsequent launches. With both instructor and student aboard, the aircraft exceeded by 82 pounds the maximum permissible take-off weight. The first attempt to launch the glider was abandoned because it drifted across the runway. During the second attempt the glider was still on the ground after rolling about 1000 feet. The instructor used elevator control to lift the glider into the air at 45 m.p.h., 3-5 m.p.h. below the normal separation speed. A height of 20-30 feet was reached with an airspeed of about 50 m.p.h., but the winch speed was low and the airspeed began to decay. A signal from the pilot calling for an increase in winch speed produced no result and the tow cable was released at about 45 m.p.h. and the nose of the glider lowered, but the speed did not increase and the glider was landed heavily, in a near stalled condition, causing substantial damage to the lower mid section of the fuselage.

8. OPINION AS TO CAUSE

The cause of the accident was that the glider was operated in an overloaded condition in an excessive crosswind and at an airspeed too low to provide a safety margin.

Report approved <i>D.S. Graham</i>	Designation Assistant Director-General (Air Safety Investigation)	Date 15.7.1970
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(D.S. GRAHAM)

15.7.1970

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 cowling, 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".