

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

AS/733/1029

Publication of this report is authorised by the Director-General of Civil Aviation under the provisions of Air Navigation Regulation 283(l)

1. LOCATION OF OCCURRENCE

One mile north of Mansfield, Victoria.	Height a.m.s.l. 1050 feet	Date 25.4.73	Time (Local) 1425 hours	Zone EST
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2. THE AIRCRAFT

Make and Model Beech P35 "Bonanza"	Registration VH-MNC	Certificate of Airworthiness Valid from 19.1.67 to 18.1.76
Certificate of Registration issued to Tri-Steel Industries Pty. Ltd., 263 Boundary Road, Mordialloc, Victoria.	Operator Royal Victorian Aero Club, P. O. Box 32, Cheltenham, Victoria.	Degree of damage to aircraft Substantial Other property damaged Nil.
Defects discovered		In-service failure of the big end bearing and connecting rod for the No. 4 cylinder

3. THE FLIGHT

Point of intended departure point Tamworth	Time of departure 1156 hours	Next point of intended landing Moorabbin	Purpose of flight Travel	Class of operation Private

4. THE CREW

Name Reinhard Gasper FEHER	Status Pilot	Age 25	Class of licence Private	Hours on type 33	Total hours 229	Degree of injury Serious

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

Name Graham CHARLTON Alexis CHARLTON	Status Passenger Passenger	Degree of injury Serious Serious	Name Anne Marie DELIKAT	Status Passenger	Degree of injury Minor

6. RELEVANT EVENTS

The aircraft was cruising in a southerly direction at an altitude of 4500 feet above mean sea level in clear weather conditions north of Mansfield when there was a substantial loss of engine power and smoke issued from the engine and entered the cabin. The pilot checked the engine controls and selected the mixture control to the idle cut-off position. He made a distress radio call to the Melbourne Flight Service Unit and reported that he had a suspected engine fire and intended to make a forced landing two miles north of Mansfield. A field to the left was selected by the pilot as being suitable for a forced landing and he planned to fly down the western side of the field and make a left turn of about 180 degrees to land to the north into a light northerly surface wind. As the aircraft descended the undercarriage was selected down and a left hand turn was commenced but, as the turn progressed, the pilot decided that the field which he had selected was unsuitable and that he would now land in the field adjacent to and to the west of that originally selected. At this stage the starboard wing dropped and, despite recovery action taken by the pilot, the aircraft veered to the right until it was heading some 45 degrees to the right of the intended final approach path at a very low height. The aircraft then struck the upper limbs of a large gum tree at a height of about 50 feet, passed through the upper section of the tree and dropped steeply into a nearby small dam coming to rest in a level attitude in water some four feet in depth. Subsequent investigation indicated that the engine power loss was the result of an in-service failure of the No. 4 cylinder connecting rod big end bearing as a result of which the connecting rod had fractured and penetrated the crankcase.

OPINION AS TO CAUSE

The cause of the accident was that following a loss of engine power, the pilot did not ensure that a safe airspeed margin above the stalling speed was maintained during the forced landing approach.

Approved for publication

(Frank E. Yeend)
Deputy of the Director-General of Civil AviationDate
2.8.1974

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".