1. LOCATION OF OCCURRENCE

2.5km northwest of Moorooduc Aerodrome, Vic.

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<tr>
<th>Height:</th>
<th>Date:</th>
<th>Time:</th>
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<td>1000 feet</td>
<td>28.9.80</td>
<td>1555</td>
<td>EST</td>
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2. THE AIRCRAFT

Make and Model: Cessna 172N

Schneider ES60/2 Glider

Registration: VH-EAG

VH-GRT

3. RELEVANT EVENTS

At approximately 1555 hours, Eastern Standard Time, on 28 September 1980, a Cessna 172N aircraft, registration VH-EAG, and a single-place Schneider ES60/2 glider, registration VH-GRT, collided in flight at a height of about 1000 feet above a point some 2.5km northwest of Moorooduc Aerodrome, Victoria.

Both the right wing and right horizontal stabilizer of the Cessna separated during the collision. The remainder of the aircraft dived steeply to the ground, killing the pilot and three passengers on impact. The glider virtually disintegrated during the collision and its pilot was probably killed at that time.

VH-EAG was owned by a and was operated by T. The company held charter, aerial work and flying school licences and conducted its business from Moorooduc Aerodrome, an authorised landing area adjacent to the Mornington-Tyabb Road.

VH-GRT was owned and operated by the . This club also conducted its operations from Moorooduc Aerodrome.

Certificates of Airworthiness had been issued in respect of both VH-EAG and VH-GRT. Both aircraft had been flown previously that day by other pilots and were reported to be fully serviceable.

Moorooduc Aerodrome is at an elevation of 200 feet and has a single grass strip, orientated 170/350 degrees magnetic. This strip was used by both powered aircraft and gliders. Air Traffic Control facilities are not available and pilots are required to operate on a "see and be seen" basis, each being individually responsible for ensuring adequate separation with other aircraft in the area. All circuits were flown to the west of the aerodrome; left-hand for operations into the north and right-hand for operations into the south. Local-based powered aircraft would join the circuit by descending to the circuit height of 1000 feet on the eastern side of the aerodrome, then flying to the west across the centre of the strip to observe the windsock, and turning left or right onto a downwind leg, as required for a landing on the into-wind strip. However, gliders engaged in short-duration local flights would normally be towed upwind of the aerodrome and rejoin the circuit directly onto the downwind leg.

Weather conditions in the vicinity of Moorooduc were fine. There was no cloud and visibility was unrestricted, except towards the west where, at the time of the accident, the sun was at an elevation of
5. RELEVANT EVENTS

28 degrees, causing considerable glare. The surface wind was from the northwest at about 10 to 15 knots and all aircraft were taking off and landing into the north.

The pilot of VH-EAG was, aged 44 years. He held a current private pilot licence which was endorsed for Cessna 172 aircraft. His flying experience amounted to 308 hours, of which 113 hours had been gained in Cessna 172 aircraft. Mr McDonald had last completed a medical examination for the renewal of his pilot licence on 26 August 1980. He met the required standard except in respect of visual acuity, and his licence was endorsed with a requirement to wear correcting lenses while flying. Spectacles were not recovered from the wreckage of VH-EAG but an empty spectacles case was found. It was also reported by persons who knew the pilot, that he wore his spectacles at all times, including while flying.

VH-EAG had taken off from Moorooduc Aerodrome at about 1510 hours, on a pleasure flight around the local area. The passengers were and two children, and the movements of the aircraft subsequent to its departure were not determined but at the time of the accident it was probably rejoining the circuit.

The pilot of VH-GRT was, aged 31 years. He was the holder of a F.A.I. 'Silver C' gliding certificate and was a member of the Peninsula Soaring Association. His gliding experience amounted to 82 hours, of which 19 hours had been gained on the Schneider ES6C/2. There is no requirement for glider pilots to undergo regular medical examinations to maintain their certificates but Mr Edmondson was reported to be in good health on 28 September 1980.

At 1541 hours, VH-GRT was aero-towed to a position some 5 km north of Moorooduc Aerodrome and released at a height of 2000 feet. The tug aircraft then returned to the aerodrome to complete another launch.

At approximately 1555 hours, persons on the ground in the vicinity of Moorooduc and Bungower Roads noticed VH-GRT as it tracked to the south, at a height of about 1000 feet, apparently joining the Moorooduc Aerodrome circuit, on a wide left downwind leg for a landing into the north. The glider then commenced a shallow left turn, probably intended to take it onto the normal downwind displacement. The Cessna aircraft was then observed ahead and to the left of the glider. It was tracking from east to west, on the crosswind leg of the circuit pattern, and appeared to be slightly higher than VH-GRT. As the two aircraft closed, VH-EAG suddenly banked steeply to the right and VH-GRT appeared to pull up. The aircraft then collided, virtually head-on.

Examination of the wreckage found no evidence of any defect or malfunction which might have contributed to the accident. The pattern of damage indicated that at the time of the collision, VH-EAG was banked to the right at approximately 60 degrees. Its left wing, propeller and forward fuselage had cleared VH-GRT but its right wing had struck the inboard leading edge of the glider's left wing, cutting through the wing and across the glider's fuselage. The right main
6. RELEVANT EVENTS

Wheel of VH-EAG had also struck and dislodged a section of the glider's right wing. The nose of VH-GRT had then struck the Cessna's right stabilizer. The abnormal attitude of VH-EAG suggested that its pilot had sighted the glider just before the collision and initiated avoiding action.

7. RELEVANT FACTORS

1. While operating in the circuit area of an uncontrolled aerodrome, neither pilot maintained the high degree of vigilance necessary to ensure separation from other traffic.

2. The glare of the sun would have restricted the vision of the pilot of VH-EAG.

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(P.E. Choquenot) Director  
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