

Aircraft type and registration:	Piper PA28 Cherokee 140 G-AVYO (light single-engined fixed-wing aircraft)	
Year of Manufacture:	1964	
Date and time (GMT):	8 July 1984 at 1515 hrs	
Location:	Sandown, Isle of Wight	
Type of flight:	Private (pleasure)	
Persons on board:	Crew — 1	Passengers — 3
Injuries:	Crew — Nil	Passengers — Nil
Nature of damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	22 years	
Commander's total flying experience:	68 hours (4 of which were on type)	
Information Source:	Aircraft Accident Report form completed by pilot and report by Joint Airmis Working Group	

The aircraft left Shoreham for Sandown in clear weather with an ambient temperature up to 30°C. With a pilot, 3 passengers and a nearly full fuel load on board, the aircraft was close to its maximum all-up-weight. The fuel in use of AVGAS 100LL.

As the pilot approached Sandown he attempted to climb from 1700 to 2000 feet to fly a standard joining procedure for a right-hand circuit on runway 23. He found that when he applied full power the engine misfired continuously and he thought later that these symptoms might have been caused by fuel starvation due to high temperature or, possibly, by a faulty accelerator pump. When he throttled back to cruise power, the misfiring became less severe and, by the time he reached the downwind position at 1000 feet, the engine appeared to be running normally. Whilst the PA28 was in the circuit, a non-radio-equipped Piper Cub took off to the south from a school playing field located some 800 metres short of the threshold of runway 23 and 250 metres left of the extended runway centre-line. The Cub pilot flew south until he had cleared a row of trees that ran along the western side of the playing field and then curved left across his take-off path. After clearing the trees he turned right to avoid some houses and then left to climb on the dead (south) side of the runway.

In his report after the accident the PA28 pilot stated that, after turning on to base leg, he selected carburettor air to full hot and lowered two stages of flap. On finals he closed the throttle and lowered full flap. When at a height between 50 and 100 feet at 75 kt, he saw the Piper Cub on his left at the same level and between 100 and 150 feet away. Thinking that the Cub was about to land on the runway, he banked sharply to the right and attempted to overshoot. He opened the throttle and selected carburettor cold air but the engine failed to respond normally, achieving only 2000 rpm and again misfiring. Although he retracted one stage of flap, he was unable to climb; his speed was only 60 kt, and the stall warning was operating continuously. He decided to make an emergency landing and eventually touched down on an upslope in a field of wheat approximately 1½ miles west of the aerodrome. The aircraft bounced once and turned upside down. The occupants escaped with only minor cuts and bruises.

The airport manager, who is also the air/ground radio operator, at Sandown, was aware that the Piper Cub would fly that day from the aerodrome to the school playing field and back again. He had agreed with the pilot that the aircraft would be flown to the field before the aerodrome opened and would return only after it had closed. In the event, the Cub pilot decided to return earlier than arranged but did not inform the airport of this decision. Thus, when the PA28 pilot requested joining instructions, there was no warning of the impending take-off of the Piper Cub. Moreover, as the view of the approach from the control office at Sandown is obstructed by a hangar, the airport manager could see neither aircraft when the PA28 was on finals.

The Joint Airmis Working Group investigated the airmis aspect of the accident and found that eyewitness evidence of the relative positions of the two aircraft was conflicting. The Cub pilot stated that throughout his take-off and climb he had remained south of the runway and did not see the PA28. There was thus no corroboration of minimum separation but they, nevertheless, concluded that there appeared to have been a possible risk of

collision. They also considered that, if the Cub pilot had telephoned to warn the airport manager of his intended early departure, the PA28 pilot could have been warned and the airmiss would probably not have occurred.

No report was made of any examination of the engine of the crashed aircraft and no evidence is available to indicate any likely cause of the engine failure.