

**Aircraft type and registration:** Slingsby T67A G-BJZM

**No & Type of engines:** 1 Lycoming O-235-L2A piston engine

**Year of Manufacture:** 1966

**Date and time (UTC):** 29 March 1987 at approximately 1515 hrs

**Location:** Near Brandesburton, North Humberside

**Type of flight:** Private

**Persons on board:** Crew — 1                      Passengers — 1

**Injuries:** Crew — 1 (fatal)                      Passengers — 1 (fatal)

**Nature of damage:** Aircraft destroyed

**Commander's Licence:** Private Pilot's Licence and Private Pilot's Licence (Helicopters)

**Commander's Age:** 25 years

**Commander's Total Flying Experience:** 65 hours fixed wing (including 11 hours on type) and 64 hours rotary wing

**Information Source:** AIB Field Investigation.

The pilot had flown 11 hours on G-BJZM during his initial fixed wing PPL training at Humberside, after having already obtained a PPL(H). He gained his PPL(A) on 15 May 1986. His log book records his first flight in the T67A on 26 March 1986, during which he carried out aerobatics and circuits. All other log book entries related to standard exercises and pleasure flights, with the exception of a 35 minute aerobatic familiarisation flight in a CAP10 aircraft on 25 June 1986. This flight was with an experienced aerobatic pilot and instructor who reported that the flight was unremarkable.

The accident pilot had flown into Bridlington on 22 March 1987 and noted that ZM was now operating from there. He booked the aircraft for a local flight on the following Sunday. On 29 March 1987 he arrived at Bridlington with a female passenger and took-off in ZM at 1445 hrs.

The aircraft was seen to overfly a gravel pit north east of Sandsfield Farm at low level heading in a southerly direction, then turn right towards the north and the farm buildings. The aircraft turned left behind the buildings and continued the turn until it was heading eastwards across the front of the farmhouse where it descended to a reported 15 feet before pulling up to 100 to 200 feet above ground level (AGL). The aircraft then turned 180° to the left flying back towards the field in front of the farmhouse maintaining a straight and level attitude until approaching a point abeam the farmhouse. The aircraft then executed a half roll to the left, after which the nose was seen to drop. From this inverted position the aircraft pitched towards the ground, passing through the vertical to hit the field at an angle of 60° to the horizontal, and heading in the direction from which it had come. The hitherto steady engine noise ceased abruptly on impact. There was no fire and the two occupants were killed instantly. The pilot was known to

the occupants of the farm and had flown over it on a number of occasions.

Examination of the wreckage confirmed the steep nose-down impact attitude of the aircraft reported by the witnesses. It had struck the ground at high speed on a south easterly heading and completely disintegrated. The condition of the propeller suggested that it had been rotating at high rpm at impact and no evidence was found of pre-impact structural or mechanical failures of the airframe or flying controls.

Flight tests conducted on a similar aircraft indicated that at least 500 feet would be required to complete a half-roll and pull through manoeuvre. For the aircraft to have achieved its impact attitude, the manoeuvre would have had to have been initiated at above 200 feet AGL.