

Socata TB10, G-OFIT, 10 June 1996

AAIB Bulletin No: 8/96 Ref: EW/G96/06/25 Category: 1.3

Aircraft Type and Registration: Socata TB10, G-OFIT

No & Type of Engines: 1 Lycoming O-360-A1AD piston engine

Year of Manufacture: 1989

Date & Time (UTC): 10 June 1996 at 1255 hrs

Location: Tower Farms, Whiteparish, Hampshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: One wing scrapped; damage to other wing and fuselage; propeller damaged and engine shock-loaded

Commander's Licence: Private Pilot's Licence with IMC and Night Ratings

Commander's Age: 39 years

Commander's Flying Experience: 685 hours (of which 500 were on type)

Last 90 days - 30 hours

Last 28 days - 10 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB

In preparation for a flight into Tower Farms Airstrip, the pilot had completed some short landing training on grass runways with a flying instructor; they had confirmed the landing configuration stall speed as 52 kt and the pilot was confident that he could stop well within the landing distance available at Tower Farms. The main airstrip which is grass, is orientated 040°/220° and has a length of 250 metres. The only suitable landing direction is 040° because that approach path is clear and there is a hedge close to the northern end of the airstrip; additionally, the landing area is sheltered from the wind. There is a further clear area suitable for take-off; this has a downslope and an available length of 500 metres.

On the day of the accident, the weather was good and the pilot assessed the surface wind on the airstrip as variable between 5 and 7 kt; an aftercast from The Meteorological Office at

Bracknell indicated that the surface wind in the area was 200°/8 to 10 kt. After some 45 minutes general handling, the pilot flew over the airstrip and then made an approach for a touch-and-go. Using full flap, he achieved his target threshold speed of 60 kt and touched down at the start of the strip; he then applied power and achieved an early and comfortable take-off and climb. For the next approach to a full stop, he again used full flap but settled for a slightly slower approach speed; he recalled hearing the stall warning as he touched down, again at the start of the strip. He applied brakes and considered the initial retardation as effective. However, even though he maintained the brake application, he was aware that his retardation was reducing. At the end of the airstrip, there is a fence supported by wooden posts and the pilot was unable to stop G-OFIT colliding with the fence. Subsequently, when he examined the landing area he noted that, although the grass was short and dry, it was covered with loose hay which was damp. The pilot considered that the accident was caused by an accumulation of this hay under his main wheels resulting in a reduction in braking action.

The aircraft manufacturer details a gross landing run of 205 metres and a gross take-off run of 370 metres at the maximum take-off and landing weight of 2,535 lb; these figures are based on a hard surface. The pilot of G-OFIT estimated his landing weight as 1,837 lb. Information on airstrips and aircraft performance is contained within CAA General Aviation Safety Sense Leaflets No 12 and 7 respectively.