

**Aviation Safety Investigation Report
198202448**

Socata TB-10 Tobago

14 February 1982

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the CEO of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 198202448
Location: Lilydale VIC
Date: 14 February 1982
Highest Injury Level: Fatal
Injuries:

Occurrence Type: Accident

Time: 1320

| | Fatal | Serious | Minor | None |
|--------------|----------|----------|----------|----------|
| Crew | 1 | 0 | 0 | 0 |
| Ground | 0 | 0 | 0 | - |
| Passenger | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 0 | 0 |

Aircraft Details: Socata TB-10 Tobago
Registration: VH-TBC
Serial Number:
Operation Type: Aircraft Demonstration
Damage Level: Substantial
Departure Point: Lilydale VIC
Departure Time: 1320
Destination: Lilydale VIC

Approved for Release: 13th March, 1984

Circumstances:

The pilot was employed as an aircraft salesman. He had previously been employed in the field of aircraft sales in the United Kingdom and the United States of America. During his time in the United Kingdom the pilot claimed to have performed flying displays at three air shows. After joining the company the pilot received training from another company aircraft salesman and was initially approved only to demonstrate aircraft to customers but not at airshows. When it became evident that several airshows were in the offing, the company had one of its experienced check and training pilots fly the planned airshow flying sequence with Mr Eberbach. This check flight was completed to the check pilot's satisfaction on the afternoon of 4/02/1983 in VH-TBC. On 6/02/1983 the pilot completed the flying sequence at the Welshpool Air Show. The Maroondah Air Show was conducted at Lilydale on 13/02/1983 and 14-2-83. On 13/02/1983 after the completion of the air show briefing involving all participants, Mr Eberbach and another company pilot returned to the company caravan with the company's marketing manager. All three then conducted a detailed briefing on the sequence to be flown by Mr Eberbach, confirming heights and speeds for all manoeuvres to be flown. The display was then completed without any evident problems. On the morning of 14/02/1983 the pilot attended the air show briefing but as the same manoeuvres were to be flown as on the previous day no individual briefing was held. The weather conditions on the day were not ideal for display flying, with a temperature of 36 degrees celsius and a northerly wind of about 10 knots with gusts up to 20 knots. The turbulence was reported to have been moderate from the effect of thermals and trees on the airfield boundary. The pilot taxied VH-TBC to the holding point about ten minutes before his planned take-off time. After taking off, the display sequence was flown normally up until the final steep turn manoeuvres. The aircraft approached the airfield from the southwest at a height of approximately 200 feet above ground level and commenced a left turn at an angle of 60 degrees. The turn was continued through 360 degrees and then the aircraft was rolled into a turn to the right at a similar angle of bank. The aircraft appeared to climb slightly in the initial part of the turn to the right

and after turning through 90 degrees the angle of bank increased to 100 degrees and the nose of the aircraft began to drop below the horizon. The aircraft then recovered to a wings level attitude, the nose of the aircraft was raised above the horizon, but the aircraft impacted the ground heavily on all three wheels. The wheels and right mainplane broke off and as the aircraft slid forward the engine was torn from its mountings and lodged underneath the fuselage. The aircraft slid for a distance of 90 metres and turned through 180 degrees before coming to rest. Subsequent investigation did not disclose any fault with the aircraft that would have contributed to this accident.

Significant Factors:

- 1 The pilot was inexperienced on the type of aircraft and also in low level display flying.
- 2 The weather conditions, with high temperatures and gusty winds, were unfavourable for display flying.
- 3 After the aircraft became overbanked in a steep turn, for undetermined reasons, the pilot was unable to effect a recovery in the height available.