

ACCIDENT

Aircraft Type and Registration:	Socata TB 20 Trinidad GT, N565G	
No & Type of Engines:	1 Lycoming IO540 piston engine	
Category:	1.3	
Year of Manufacture:	2002	
Date & Time (UTC):	9 October 2005 at 1112 hrs	
Location:	Caernarfon Airport, Gwynedd, Wales	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to tips of propeller	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	64 years	
Commander's Flying Experience:	1,085 hours (of which 415 were on type) Last 90 days - 46 hours Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

The pilot was flying to Caernarfon Airport from Blackpool Airport. Runway 20, which has a LDA of 1,031 m, was in use at Caernarfon and its asphalt surface was dry.

An aftercast obtained from the Meteorological Office stated that the synoptic situation showed a fresh south-westerly flow covering Wales. The visibility was expected to have been 20 km with a few scattered cumulus clouds at 2,500 to 3,000 ft. The mean sea-level surface wind over the area was expected to have been from 200° at 25 to 27 kt, gusting to 35 kt. However, with this surface wind direction, Caernarfon is slightly in the lee of the

Lleyn Peninsula. Consequently, the wind could have had a more variable direction and speed at times as a result of funneling through the valleys and around the hills to the south-south-west of the airfield. This could have meant the wind was more southerly at times, perhaps with a larger variation in speed. These wind conditions would have made low-level turbulence likely in the area. Given the wind strength and proximity of high ground, the degree of turbulence would almost certainly have been moderate but it could have been severe at times.

The pilot reports that the surface wind was 190°/25 kt and gusty whilst he was making a normal approach to

Runway 20. He added that he was flying approximately 10 kt faster than the normal approach speed of 80 kt because of the gusty conditions. As he was approaching the normal touchdown point, at approximately 10 ft agl, the aircraft's nose suddenly dropped by about 10° to 15°; at the same time he became aware of a significant drop in the aircraft's indicated airspeed. He immediately applied a "burst of power" and pulled the control column back in an attempt to arrest this change in attitude and the increased rate of descent. These actions had some effect but the aircraft then bounced on its nose wheel before landing on its main landing gear. Initially the pilot did not think the aircraft was damaged. However, after shutting down and vacating the aircraft, he discovered that 5 cm of each propeller tip had been bent as a result of striking the runway. He thought this had happened when the aircraft landed on its nose wheel.

Aircraft damage

An assessment of the damage by the repair agency found that the propeller was damaged beyond economical repair and the engine was examined for shock-loading damage.

Eyewitness report

An eyewitness to the landing of the incident aircraft and other aircraft stated that he had noticed a lot of them "drop dramatically" on the final approach, albeit from a greater height than the accident aircraft. He added that he thought the pilot of N565G could not have done anything else in the circumstances.