

ACCIDENT

Aircraft Type and Registration:	Piper PA-38-112 Tomahawk, G-BMML	
No & type of Engines:	1 Lycoming O-235-L2A piston engine	
Year of Manufacture:	1980	
Date & Time (UTC):	12 September 2006 at 1524 hrs	
Location:	Barton Aerodrome, Manchester	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Aircraft damaged beyond economic repair	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	43 years	
Commander's Flying Experience:	762 hours (of which 327 were on type) Last 90 days - 78 hours Last 28 days - 31 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and AAIB inquiries	

Synopsis

The instructor was teaching his student the short field takeoff technique from a grass strip. Shortly after taking off the aircraft was seen to stall and crash into a hedge. Both the instructor and student were unhurt but the aircraft was damaged beyond economic repair.

History of the flight

The instructor had briefed the student on the short field takeoff technique with the intention that he would talk him through the departure and follow him through on the controls. The aircraft was lined up on the threshold of Runway 09L, which is a grass runway with a Takeoff Run Available (TORA) of 518 m. One notch of flap (21°) was selected and the aircraft was held on the brakes

as the engine power was increased. The brakes were released and as the air speed increased the instructor noted that the engine gauges read normally. The rotation, acceleration in ground effect and the initial part of the climb went without incident, but as the aircraft began to climb away the instructor noted that the nose of the aircraft was too high. He therefore lowered the nose into the correct attitude and instructed the student to maintain this attitude; however the nose again began to rise and so the instructor took control of the aircraft. At this point the instructor reported that the controls felt 'sloppy' and he became aware that the aircraft was descending. He therefore lowered the nose and checked that the throttle lever was fully forward. With insufficient runway

remaining on which to land, and conscious of a busy road directly ahead, the instructor reported that he steered the aircraft towards a hedge into which it then crashed. The instructor and student, who were both unhurt, vacated the aircraft through the normal exits. The aircraft was extensively damaged as a result of hitting two concrete posts concealed in the hedge.

Report from Flight Information Service Officer (FISO)

The FISO, who observed the aircraft taking off from the tower, reported that at the time of the accident the wind was from 160° at 5 kts. He reported that during the takeoff run the acceleration seemed slow and once the aircraft reached the intersection of Runway 02/20 the aircraft pitched up and appeared to struggle to climb away. On reaching the end of Runway 09L the aircraft appeared to stall and to enter a steep nose-down pitch attitude.

The FISO reported that the emergency services responded in good time, with the Airport Fire Service responding immediately and the local fire service, ambulance and police arriving shortly afterwards.

Comments

The instructor reported that the aircraft was equipped with a vane type stall warner and that he was not aware of it operating during the accident. He believes that the accident happened because the aircraft pitched up too much during the climb causing the aircraft to enter a stall.