

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Luscombe 8E Silvaire Deluxe, G-AGMI	
<b>No &amp; Type of Engines:</b>	1 Continental Motors Corp C85-12F piston engine	
<b>Year of Manufacture:</b>	1941 (Serial no: 1569)	
<b>Date &amp; Time (UTC):</b>	23 July 2014 at 0925 hrs	
<b>Location:</b>	Private airstrip near Albourne, West Sussex	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Damage to left wing and propeller	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	68 years	
<b>Commander's Flying Experience:</b>	826 hours (of which 119 were on type) Last 90 days - 13 hours Last 28 days - 6 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

During takeoff a hinged cover on the aircraft's pitot probe, designed to deflect under air loads, did not operate correctly, giving erroneous airspeed indications. The pilot abandoned the takeoff but the aircraft overran the grass strip and collided at very low speed with a hangar.

**Description of the event**

The weather was fine with good visibility; the surface wind was generally from 030° at 8 kt, but the direction was variable between 010° and 130°. The grass, of the 440 m long airstrip, had been recently cut. Take off was planned in a direction of 020°. The pilot carried out a normal pre-flight inspection, during which the pitot cover was checked for correct operation. The cover was a hinged flap arrangement, designed to move under air loads to expose the pitot tube orifice.

The takeoff roll appeared normal initially, but about two-thirds of the distance along the strip, the indicated airspeed was approximately 40 mph so the pilot decided to abandon the takeoff. As he did so, his passenger announced that the pitot cover had not opened. The pilot applied wheel brakes and braking action seemed effective at first but then became less so. With about 80 m of strip remaining, the aircraft was not slowing as expected despite firm brake application, and started to drift to the left.

The aircraft's outer left wing made contact with a hangar at an estimated 10 mph, causing the aircraft to yaw left, which brought its propeller into contact with the wire mesh hangar gates. The contacts occurred at very slow speed and neither the pilot nor his passenger was injured.

The aircraft's brakes were later tested and found to operate normally. The pilot believed that braking effectiveness may have been reduced as the aircraft passed over uneven ground and weight was taken off the wheels, and that possibly the brakes had faded or locked the wheels on the recently cut grass. No reason was found for failure of the pitot cover to open during the takeoff roll. The pilot intended to investigate the feasibility of removing the existing pitot probe and installing one without a hinged cover.