

Shadow Series CD, G-MTMY

AAIB Bulletin No: 10/2003	Ref: EW/G2003/07/28	Category: 1.4
INCIDENT		
Aircraft Type and Registration:	Shadow Series CD, G-MTMY	
No & Type of Engines:	1 Rotax 503-2V piston engine	
Year of Manufacture:	1987	
Date & Time (UTC):	27 July 2003 at 1407 hrs	
Location:	Redhill Aerodrome, Surrey	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Undercarriage, propeller and wing tip	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	63 years	
Commander's Flying Experience:	687 hours (of which 414 were on type)	
	Last 90 days - 23 hours	
	Last 28 days - 12 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The flight was a training detail involving circuit practice. Runway 26L was in use and the wind was 280°/14 kt and gusting slightly. The student had already completed a number of 'touch and goes' to an acceptable standard and was to land off this approach, which was a simulated short field landing. The powered approach was flown at 50-52 kt with flaps deployed, with the student handling and the instructor following up on the controls. The approach was satisfactory but, during the round out, the main wheels contacted the ground in a firm touch down. The left wing then dropped and a shudder was felt throughout the airframe. The instructor immediately levelled the wings with right stick input and the aircraft made a small bounce. After the next touchdown the left wing dropped again and the aircraft slewed to the left, departing the side of the runway. It came to rest on the right mainwheel, nose wheel and left wing tip. The engine was shut down and the instructor and his student were able to exit the aircraft without difficulty.

On examining the aircraft they noted that the left hand undercarriage assembly and a propeller blade had broken off and were lying about 50 metres back along the runway. The fibreglass undercarriage support rods had sheared off at the upper frame sockets and in separating had struck the propeller, breaking off one of the blades.

The instructor recalled feeling an unexpected "lurch" to the left on the touch and go prior to the landing. Additionally, the right main wheel had been replaced immediately prior to this flight because

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of a crack in the wheel hub. The instructor believed that this evidence pointed to the aircraft having previously suffered a heavy landing, which may have overstressed and damaged the left landing gear, and that the circuit training and firm landing during this flight had caused it to finally fail.