

Rans S10 Sakota, G-BUAX

AAIB Bulletin No: 8/2004	Ref: EW/G2004/06/03	Category: 1.3
Aircraft Type and Registration:	Rans S10 Sakota, G-BUAX	
No & Type of Engines:	1 Rotax 582 piston engine	
Year of Manufacture:	1993	
Date & Time (UTC):	6 June 2004 at 1745 hrs	
Location:	Peterlee, County Durham	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to right wing, propeller, engine cowlings and landing gear	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	28 years	
Commander's Flying Experience:	80 hours (of which 10 were on type)	
	Last 90 days - 4 hours	
	Last 28 days - 2 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of the flight

The pilot was taking his wife for her first flight in G-BUAX on a short tour of the local area. The weather was good with the surface wind of 300°/5-10 kt and some high cloud. Having carried out a thorough pre-flight inspection, which included proper inflation of the landing gear tyres, the pilot and his passenger boarded the aircraft. Following a normal engine start the aircraft was backtracked along Runway 30 which is a grass runway, 640 metres long by 30 metres wide and described by the pilot as having a firm surface in good condition but with some shallow ruts.

Clearance for takeoff was obtained, full power applied and the aircraft accelerated normally along the runway with the tail wheel lifting at the usual point just prior to getting airborne. As the aircraft reached 60 mph, the left main landing gear wheel felt as though it snagged or jammed and quickly slowed causing the aircraft to turn rapidly to the left. The pilot closed the throttle but the aircraft rolled to the right causing the right wing to strike the ground before rolling wings level again as the aircraft struck a grass bank to the left of the runway, shattering the propeller and stopping the engine.

The aircraft mounted the bank collapsing the right main landing gear. The pilot turned off the fuel and magnetos and made a short radio transmission explaining the situation. Persons on the airfield immediately attended the scene and the aircraft occupants were able to vacate the aircraft unassisted through the normal exits.

Analysis

The mainwheel tyres on the Rans S10 are 11 inches in diameter with wheel spats extending slightly below the wheel axle. This arrangement gives only a small amount of clearance below the spat and if the wheel enters a rut, it is possible for the spat to contact the ground causing a deceleration on that side. A post-accident inspection of the landing gear tyres showed that the left mainwheel tyre had deflated. The pilot observed what he described as a cut or slash in the tyre, which was not there when the pre-flight inspection was carried out. Whilst it was not clear if this damage was the initiating event or a result of the accident, there was a sudden turn to the left which the pilot was unable to counter with the controls before the aircraft struck the grass bank.